British Columbia Building Code

Change Process

Challenge / Amendments and Code Advisory
Committee Recommendations
for the1990 B.C. Building Code

August 1991

> Please retain this document for future reference during the process as it will not be re-issued at a later date.

Building Standards Branch
Ministry of Municipal Affairs, Recreation and Culture
The Honourable Graham P. Bruce, Minister

BC
B88
D:8773
1991
c. 3

1990 B.C. Building Code Change Challenge / Amendments and Code Advisory Committee Recommendations

General:

The following is a list of challenge / amendments to the original code change proposals included in our Proposal Publication dated February 1991. The list also includes the Code Advisory Committee's (C.A.C.) recommendations on both the original proposals and these subsequent challenge / amendments.

The entries are listed in the same order as previously published and the "reasons" are presented "as submitted" with only minor editorial changes where needed for clarity. In many cases reference is made to substantiating documentation which is not reproduced in its entirety due to space limitations. The full documentation will be used by the Voting Group during their deliberations and is available for viewing by other interested parties on request.

In some cases the challenge reference number used may differ slightly from the number already intimated to the submitter. This is due to duplicate or incorrectly numbered submissions which "baffled" our computer numbering system. To prevent a repeat of this problem please **use only** the bold number opposite **"Proposal or Chall./ Amend. Ref. No. "** in all future correspondence. **Do not use** the small sequential number at the start of each entry.

Method of Presentation:

The order of presentation is as follows:

C.A.C. recommendation and comment on the original proposal :- numbered as per previously published document e.g. Ref. No. **204.**

Challenge(s) or proposed amendment(s) to this proposal (if any submitted) in numerical order, with respective C.A.C. recommendation (s) and comment (s) :- numbered as per original proposal with decimal addition e.g. Ref. No. **204.03** indicates the third challenge to original proposal # 204.

Names of the challengers have deliberately been excluded since each submission should be considered on its own merit, irrespective of source.

Actions required are indicated in bold type and underlined e.g. **Delete**, **Amend**, etc.

Due to space limitations, C.A.C. comments are generally brief and are only intended to give a indication of how a majority of the committee felt about the proposal or challenge. In many cases it would take pages of comment to describe all the reasons for acceptance or rejection of a particular proposal or amendment.

The Next Stage:

The publication of these C.A.C. recommendations indicates the start of the next stage in our process and your final opportunity to submit challenges in writing before the Forum. It should be emphasized that no new change proposals or amendments will be accepted at this stage, only challenges to the listed committee recommendations. These challenges should be substantiated. A copy of the appropriate challenge form is attached to the end of this document. Please indicate on each submission **the proposal or amendment reference number** of the C.A.C. recommendation being questioned and send it in before the submission deadline.

The Next Stage (Contd.):

C.A.C. recommendations not challenged in writing at this stage will be included in voting Block A at the Forum and may be voted through without further detailed consideration. Recommendations properly challenged will be automatically included in Block B and subject to detailed discussion at the Forum.

Deadline for receipt by the Branch of these challenges is midnight Tuesday October 15, 1991. Submissions postmarked before that deadline will also be accepted.

We are in the process of forming the Voting Group which will consist of a total of 24 representatives from various code user groups. Details of the membership of the Voting Group, location and date of Forum and Forum proceedings will be included in our next Branch Bulletin.

Please retain this document for future reference, this document will not be re-issued at a later date or re-printed for the code change forum.

1
Code Reference 1.1.3.2
Proposal or Chall./Amend. Ref. No. 231
Proposal :
** See Code Change Publication dated February 1991
C. A. C. Recommendation ***Reject***

C. A. C. Comments :
Proposals 231 and 232 cover energy conservation in large new buildings and requires compliance with ASHRAE/ IES 90.1 -1989 an energy efficiency standard developed in the U.S.A. The Committee after careful consideration could not recommend the use of this standard as a reference document in its present form. New national energy conservation measures are currently being developed for the next code cycle which could be substantially different from this ASHRAE standard. As an interim measure, the Committee has amended an other proposal requiring minimum insulation levels in residential occupancies .

1.1
Code Reference See above
Proposal or Chall./Amend. Ref. No. 231.01
Challenge/ Amendment :
C. A. C. Recommendation ***Reject***
Support proposal:

Reason:
This amendment only restated original submission.

C. A. C. Comments :
Proposals 231 and 232 cover energy conservation in large new buildings and requires compliance with ASHRAE/ IES 90.1 -1989 an energy efficiency standard developed in the U.S.A. The Committee after careful consideration could not recommend the use of this standard as a reference document in its present form. New national energy conservation measures are currently being developed for the next code cycle which could be substantially different from this ASHRAE standard. As an interim measure, the Committee has amended an other proposal requiring minimum insulation levels in residential occupancies .

2
Code Reference 1.1.3.2.
Proposal or Chall./Amend. Ref. No. 223
Proposal :
** See Code Change Publication dated February 1991
C. A. C. Recommendation ***Reject***

C. A. C. Comments :
The Committee recognizes the concern of the proponent but there are a number of common situations to which this proposal should not apply and its implementation as proposed would result in future interpretation problems.

2.1
Code Reference See above
Proposal or Chall./Amend. Ref. No. 223.01
Challenge/ Amendment :
C. A. C. Recommendation ***Reject***
Support proposal:
Explanation of original proposal.

Reason:
It has been suggested that the results of this amendment, would require the .... (See document 1 page)

C. A. C. Comments :
The Committee appreciates the additional explanatory material contained in this submission however they still consider the proposal unacceptable.

3
Code Reference 1.1.3.2.
Proposal or Chall./Amend. Ref. No. 305
Proposal :
** See Code Change Publication dated February 1991
C. A. C. Recommendation ***Reject***

C. A. C. Comments :
The committee's opinion is that this proposal would not alter the current code. If the code requirement is for a zero rating then this is the required fire-resistance rating.

3.1
Code Reference See above
Proposal or Chall./Amend. Ref. No. 305.01
Challenge/ Amendment :
C. A. C. Recommendation ***Accept***
Disapprove proposal :
Retain existing wording.

Reason:
The concept of a "fire compartment" implies a minimum resistance to fire spread which includes control of the amount of openings in the separation. Control of openings requires a fire-resistance rating.
There are many references to the term "fire compartment" which may be compromised.

C. A. C. Comments :
The Committee agrees the original proposal should be rejected.

4

Code Reference 1.1.3.2.

Proposal or Chall./Amend. Ref. No. 337

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The value of having television stations constructed as required post-disaster buildings is questionable due to the vulnerability of both cable transmission systems and power distribution cables in major earthquakes. Radio station information can still be received via battery operated transistor radios even if power systems are destroyed.

5

Code Reference 1.1.3.2.

Proposal or Chall./Amend. Ref. No. 229

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The committee agrees that there is a problem with the use of the word "public" in the code. The Committee considers that a better solution is to apply the normal dictionary meaning and /or to clarify the intent of the various individual references using this word.

5.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 229.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Support proposal:
Additional clarification.

Reason:

Clarification may be required to some members of the Committee for the definition proposed for the word "Public ".
(See document 1 page)

C. A. C. Comments :

The Committee appreciates the additional explanitary material contained in this submission but consider adding a definition is not a good solution.

6

Code Reference 1.1.3.2.

Proposal or Chall./Amend. Ref. No. 183

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee rejected this proposal after giving careful consideration to the ramifications of adding such a system directly into the code. The Committee considers this type of system should not be part of the basic code requirements but should continue to be considered under the code equivalency provisions by the authority having jurisdiction .

6.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 183.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

This appears to be a proprietary product that, if part of the structure of the building and/or supports human activities of any kind, it should be considered as a mezzanine and, therefore, all appropriate requirements of the Code, including noncombustibility and fire-resistance, should apply. If this product is simply a storage rack and does not support any human activities, it is "furniture" and should not be regulated by the Code, although the appropriate sprinkler requirements would apply.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

6.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 183.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

This proposal appears to relate to a proprietary storage system which is one of at least three types that are available. Currently, all three systems would have to be dealt with under Article 2.5 on an equivalency basis. These systems are sufficiently different that adoption of this and related proposals could put the other systems at a significant marketing disadvantage. It would be better to incorporate an automatic detection, suppression and exiting requirements that would be applicable to all three systems rather than write the specific features of one system into the Code.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

7

Code Reference 1.3.2

Proposal or Chall./Amend. Ref. No. 75

Proposal :

C. A. C. Recommendation ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

Integration of Fire Commisioner's Halls Regulations and the Code will reduce both design and site compliance problems . It is understood that the Fire Commisioner's Office intends to eliminate the Halls Regulations in all areas of the Province that are regulated by the B.C. Code.

7.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 75.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Amend the proposal as follows :

Delete definition and substitute as follows:

Licensed beverage establishment means an assembly occupancy or part thereof, except restaurants, where alcohol may be consumed and may include lounges, pubs, recreational centres, community halls, cabarets, neighbourhood public houses, marine public houses,and similar facilities. (See Appendix A)

Add to Table 3.1.14.A. under Assembly uses :
Column 1 - Licensed beverage establishment
Column 2 - 0.95

Reason:

(1) The definition of "Licensed Beverage Establishment" has been amended to more accurately reflect the common names for facilities which are licensed by the Liquor Licensing Branch.

(2) Licensed Beverage Establishment has been added to the occupant load table 3.1.14.A. under "Assembly Uses". The proposed area per person is 0.95 m2 per person. (In line with "Spaces with Non Fixed Seats & Tables").

C. A. C. Comments :

The Committee accepts this amendment as an improvement over the original submission.

7.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 75.02

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Disapprove proposal :

Reason:

(See document #75.02-A.)

C. A. C. Comments :

The Committee do not accept this challenge.

7.3

Code Reference See above

Proposal or Chall./Amend. Ref. No. 75.03

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Amend the proposal as follows :

From proposed Sentence 3.4.3.5.(3), in the second line, delete the words "floor areas containing", to read "the aggregate width of exits serving a licensed beverage establishment ...".

Reason:

To remove any ambiguity that it is only the "Licensed beverage establishment" that is to be taken at the values of 12.2 and 18.3 mm, and not for the whole floor area which contains the "licensed beverage establishment".

C. A. C. Comments :

The Committee accepts this amendment as an improvement over the original submission.

7.4

Code Reference See above

Proposal or Chall./Amend. Ref. No. 75.04

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Amend proposed Sentence 3.4.3.5.(3) by changing 18.3 to 18.4.

Reason:

If it is felt necessary to have a greater width for "licensed beverage establishments" not at ground level, then why not use the same 18.4 mm figure already "invented" for Sentence 3.4.3.5.(2)?

C. A. C. Comments :

The Committee accepts this amendment as an improvement over the original submission.

7.5

Code Reference See above

Proposal or Chall./Amend. Ref. No. 75.05

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Delete proposed Clause 3.4.2.1.(2)(c) "the floor area does not contain a licensed beverage establishment".

Reason:

Although I overwhelmingly support the goal of removing differences between the B.C. Building Code and the Public Hall & Theatre Safety Regulations issued by the Fire Commissioner's Office, I question the need to add licensed beverage establishments to the limitations of Sentence (2) when Clause (b) already limits the occupant load to 60 persons.
(I am not objecting to the proposed Clause (c), but question its need).

C. A. C. Comments :

The Committee do not accept this amendment.

8

Code Reference 2.4.1.2.

Proposal or Chall./Amend. Ref. No. 306

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers the code Article should remain since it provides a means for an inspector to question inadequate storage of materials which may be incorporated into the building in his absence.

9

Code Reference 2.8

Proposal or Chall./Amend. Ref. No. 98

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

As the proponent did not re-submit this proposal in suitable format , as requested, the Committee could not give it further consideration.

10

Code Reference 3.1.2.1.(1)

Proposal or Chall./Amend. Ref. No. 235

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not consider there was a problem in practice with this area of the code.

10.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 235.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Amend the proposal as follows :
Delete the following entry in Table 3.1.2.A and **substitute** :

A 4 Assembly *occupancies* where occupants are gathered in the open air.

Reason:

The proposal is vague. The amendment reflects the intent that A4 structures are open to the elements so that fire and smoke may escape. By this amendment closed viewing stands overlooking open air activities would properly be A3 occupancy.

C. A. C. Comments :

The Committee accepts this challenge.

11

Code Reference 3.1.4.3.

Proposal or Chall./Amend. Ref. No. 103

Proposal :

C. A. C. Recommendation ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

To bring B.C. Building Code requirements up to date with changes to the C.S.A. standard.

12

Code Reference 3.1.4.3.

Proposal or Chall./Amend. Ref. No. 258

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers these requirements should remain in the Building Code which is the prime control document for safety in construction.

12.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 258.01

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

This is a Building Fire Safety requirement. It should stay in the Building Code. This comment could be referenced in the Electrical Code. If this proposal is accepted, the Building Inspector would have to carry 2 Code books to the job site, not one as he does now.

C. A. C. Comments :

The Committee accepts this challenge.

12.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 258.02

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :
Do not amend Sentences.

Reason:

These requirements relate to other requirements in the Building Code that are not described in the Electrical Code. The Electrical Code deals with methods of installation and does not cover what types of materials are acceptable in what types of buildings or locations within buildings. If the electrical specification is written properly, contractors and tradesmen should not have to read the Building Code to find out if a particular cable, fixture box, etc. is acceptable.

C. A. C. Comments :

The Committee accepts this challenge.

13

Code Reference 3.1.5.

Proposal or Chall./Amend. Ref. No. 259

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers these requirements should remain in the Building Code which is the prime control document for safety in construction.

13.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 259.01

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

This is a Building Fire Safety requirement. It should stay in the Building Code. This comment could be referenced in the Electrical Code. If this proposal is accepted, the Building Inspector would have to carry 2 Code books to the job site, not one as he does now.

C. A. C. Comments :

The Committee accepts this challenge.

13.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 259.02

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :
Do not amend Sentences.

Reason:

These requirements relate to other requirements in the Building Code that are not described in the Electrical Code. The Electrical Code deals with methods of installation and does not cover what types of materials are acceptable in what types of buildings or locations within buildings. If the electrical specification is written properly, contractors and tradesmen should not have to read the Building Code to find out if a particular cable, fixture box, etc. is acceptable.

C. A. C. Comments :

The Committee accepts this challenge.

13.4

Code Reference See above

Proposal or Chall./Amend. Ref. No. 259.03

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

There is certainly no harm in adding similar requirements in Articles 3.1.5.15., —.(16), and —(17) to the Electrical Code, but the proposed change is to transfer them, which means removing them from the Building Code.

Even if electrical wiring is transferred, the requirements of Articles 3.1.5.15., —.(16), and —(17) will still have to remain in the Building Code for other types of cables (such as communication cables), so it would be just as well to stay with the National Building Code as is.

C. A. C. Comments :

The Committee accepts this challenge.

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14 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **21**

Proposal : 3.1.5.5. **C. A. C. Recommendation** ***Reject***

The Committee considers this is extremely restrictive in view of the research done by N.R.C. for the 1990 Code.

C. A. C. Comments :

The Committee could not accept that the points made by the proponent were valid in view of all the research and testing carried out on this subject at the national level.

14.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **21.01**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Retain Article 3.1.5.5. but **amend** Sentences (5) and (6) to read:

(5) Flaming on or in the wall assembly shall not spread more than 2.2 m above the opening during or following the flame exposure of 25 minutes.
(6) The heat flux during the flame exposure on the wall assembly shall be not more than 18 kw/m2 measured at 3.5 m above the opening.

Reason:

Deleting 3.1.5.5. would not satisfy the proposers concerns. Prior to this Article being included in the NBCC, combustible cladding (EIFS and vinyl siding in particular, not wood) was being permitted on noncombustible buildings, by Section 2.5, Equivalencies. Permission was based on tests which were inappropriate for properly evaluating claddings for such use. Recognizing this problem, a more appropriate full scale test procedure and Article 3.1.5.5. were developed as a possible solution. Although the Article is not perfect, it sets out criteria which permits the use of some combustible claddings on some noncombustible buildings.
(See document #21-A for remainder)

C. A. C. Comments :

The Committee do not consider the proposed change is justified.

14.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **21.02**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

The test criteria appearing in Article 3.1.5.5. was developed and thoroughly documented by the IRC and accepted by the Part 3 Fire Protection Committee as being a safe benchmark to permit the use of combustible cladding on noncombustible buildings. The use of this material is limited to unsprinklered buildings not exceeding 3 storeys in height and to sprinklered buildings not exceeding 6 storeys in height. It is noted that at least two test facilities are available in Canada to test such cladding systems against this established criteria.

C. A. C. Comments :

The Committee considers the Article should remain as shown in code.

14.3 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **21.03**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

The provisions of Article 3.1.5.5. are crafted to prevent the spread of fire on the exterior face of buildings. Only assemblies which can meet the stringent provisions of the code requirements are permitted, (not just any combustible siding), assemblies which do not permit flame and heat propagation. The test procedures provide a scientific, not subjective, method of evaluating the fire safety of exterior wall assemblies for use in buildings of limited height.

C. A. C. Comments :

The Committee considers the Article should remain as shown in code.

14.4 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **21.04**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Support the proposal

Reason:

Fully agree with reason given with proposal. There is no sound technical reason given to justify the requirement other than financial. There are too many materials that could be used as combustible exterior wall finishes, further study required.

C. A. C. Comments :

The Committee could not accept that the points made by the proponent were valid in view of all the research and testing carried out on this subject at the national level.

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15 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **150**

Proposal : 3.1.5.5.(1) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee prefers the approach proposed by Amendment # 181.01

15.1

Code Reference
See above

Proposal or Chall./Amend. Ref. No. 150.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

It is very difficult to properly challenge a proposed change without knowing the reasons or substantiations for the proposal. However, the following will point out why the sprinkler requirements and building height limitations should not be deleted from Article 3.1.5.5.

Some of the reasons for including these requirements and limitations in the combustible cladding requirements are :

(1) difficulty in fighting exterior fires that are beyond the reach of ground supported fire fighting equipment.
(2) added combustible loading of the cladding
(3) increased potential hazard for the occupants due to more rapid spread of fire and increased amounts of smoke and toxic gases
(4) increased potential for property damage
(5) fire origin on the exterior face of the building
(6) potential for ignition by radient heat
(7) potential for fire leap-frogging up the face of the building.

(Cont. See 1 page support document)

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

15.2

Code Reference
See above

Proposal or Chall./Amend. Ref. No. 150.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

These proposals recommend removal of both the 6 storeys height restriction and the requirement that buildings between 3 storeys and 6 storeys in height not be sprinklered for noncombustible buildings clad with combustible finishes. The 1990 edition of the National Building Code of Canada permits the limited use of combustible claddings on buildings required to be noncombustible and because this change to the Code represents a significant departure from previous practice, a conservative approach has been taken. Such an approach has been substantiated as evidenced by a subsequent fire on the exterior of an apartment buildings at 393 Kennedy Street, Winnipeg, Manitoba, on January 10, 1990. Details of the fire are contained in a report entitled "Fire Performance of an Exterior Insulation System prepared by IRC and dated August 1990. The conclusions contained in the report require further evaluation and study with respect to the potential significance of amending Article 3.1.5.5. as proposed.

C. A. C. Comments :

The Committee agrees this Sentence should be unchanged.

15.3

Code Reference
See above

Proposal or Chall./Amend. Ref. No. 150.03

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

Proposed change appears essentially to remove any height limitations to permitting combustible cladding conforming to Article 3.1.5.5. This would therefore extend to highrise buildings. The provisions of Article 3.1.5.5. are questionable enough as they are, without expanding them beyond the height limitations specified in Sentence 3.1.5.5.(1).

C. A. C. Comments :

The Committee agrees this Sentence should be unchanged.

16

Code Reference
3.1.5.5.(1).

Proposal or Chall./Amend. Ref. No. 181

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee prefers the approach proposed by Amendment # 181.01

16.1

Code Reference
See above

Proposal or Chall./Amend. Ref. No. 181.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Amend as follows:

3.1.5.5. Combustible Cladding

(1) Except when noncombustible cladding is required by Subsection 3.2.3., an exterior non-load-bearing wall assembly that includes combustible cladding components is permitted to be used in a building required to be of noncombustible construction that is not more than 3 storeys in building height, if not sprinklered, and not more than 6 storeys in building height, if sprinklered, provided the interior surfaces of the wall assembly are protected by a thermal barrier conforming to Sentence 3.1.5.11.(3) and the wall assembly satisfies the criteria of Sentences (5) and (6) when subjected to testing in conformance with Sentences (2) to (4). (See Appendix A.)

Reason:

(See document "Submission of Amendment to #181 & 182 -A thru Y.)

C. A. C. Comments :

The Committee agrees this Sentence should not be altered and prefers the treatment of EIF Systems under amendment # 182.01.

16.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 181.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

It is very difficult to properly challenge a proposed change without knowing the reasons or substantiations for the proposal. However, the following will point out why the sprinkler requirements and building height limitations should not be deleted from Article 3.1.5.5.

Some of the reasons for including these requirements and limitations in the combustible cladding requirements are :

(1) difficulty in fighting exterior fires that are beyond the reach of ground supported fire fighting equipment.
(2) added combustible loading of the cladding
(3) increased potential hazard for the occupants due to more rapid spread of fire and increased amounts of smoke and toxic gases
(4) increased potential for property damage
(5) fire origin on the exterior face of the building
(6) potential for ignition by radient heat
(7) potential for fire leap-frogging up the face of the building.

(Cont. See 1 page support document)

C. A. C. Comments :

The Committee agrees the original proposal should be rejected and prefers the treatment of EIF Systems as proposed under amendments # 181.01 and 182.01.

16.3

Code Reference See above

Proposal or Chall./Amend. Ref. No. 181.03

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Do not delete or amend Sentence 3.1.5.5.(1).

Reason:

These proposals recommend removal of both the 6 storeys height restriction and the requirement that buildings between 3 storeys and 6 storeys in height not be sprinklered for noncombustible buildings clad with combustible finishes. The 1990 edition of the National Building Code of Canada permits the limited use of combustible claddings on buildings required to be noncombustible and because this change to the Code represents a significant departure from previous practice, a conservative approach has been taken. Such an approach has been substantiated as evidenced by a subsequent fire on the exterior of an apartment buildings at 393 Kennedy Street, Winnipeg, Manitoba, on January 10, 1990. Details of the fire are contained in a report entitled "Fire Performance of an Exterior Insulation System " prepared by IRC and dated August 1990. The conclusions contained in the report require further evaluation and study with respect to the potential significance of amending Article 3.1.5.5. as proposed.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected and prefers the treatment of EIF Systems as proposed under amendments # 181.01 and 182.01.

16.4

Code Reference See above

Proposal or Chall./Amend. Ref. No. 181.04

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

Proposed change appears essentially to remove any height restrictions. Proposed change would therefore appear to permit combustible cladding conforming to Article 3.1.5.5., on a required noncombustible building, even if it is a highrise. That is risky.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected and prefers the treatment of EIF Systems as proposed under amendments # 181.01 and 182.01.

17

Code Reference 3.1.5.5.(1)

Proposal or Chall./Amend. Ref. No. 204

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee prefers the approach proposed by amendments # 181.01 and 182.01.

17.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 204.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

It is very difficult to properly challenge a proposed change without knowing the reasons or substantiations for the proposal. However, the following will point out why the sprinkler requirements and building height limitations should not be deleted from Article 3.1.5.5.

Some of the reasons for including these requirements and limitations in the combustible cladding requirements are :

(1) difficulty in fighting exterior fires that are beyond the reach of ground supported fire fighting equipment.
(2) added combustible loading of the cladding
(3) increased potential hazard for the occupants due to more rapid spread of fire and increased amounts of smoke and toxic gases
(4) increased potential for property damage
(5) fire origin on the exterior face of the building
(6) potential for ignition by radient heat
(7) potential for fire leap-frogging up the face of the building.

(Cont. See 1 page support document)

C. A. C. Comments :

The Committee agrees the original proposal should be rejected and prefers the approach proposed by amendments # 181.01 and 182.01.

17.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 204.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :
Do not delete or amend Sentence 3.1.5.5.(1).

Reason:

These proposals recommend removal of both the 6 storeys height restriction and the requirement that buildings between 3 storeys and 6 storeys in height not be sprinklered for noncombustible buildings clad with combustible finishes. The 1990 edition of the National Building Code of Canada permits the limited use of combustible claddings on buildings required to be noncombustible and because this change to the Code represents a significant departure from previous practice, a conservative approach has been taken. Such an approach has been substantiated as evidenced by a subsequent fire on the exterior of an apartment buildings at 393 Kennedy Street, Winnipeg, Manitoba, on January 10, 1990. Details of the fire are contained in a report entitled "Fire Performance of an Exterior Insulation System prepared by IRC and dated August 1990. The conclusions contained in the report require further evaluation and study with respect to the potential significance of amending Article 3.1.5.5. as proposed.

C. A. C. Comments :

The Committee agrees this Sentence should be unchanged and prefers the approach proposed by amendments # 181.01 and 182.01.

17.3

Code Reference See above

Proposal or Chall./Amend. Ref. No. 204.03

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

The proposed change appears essentially to remove any height limitations on combustible cladding conforming with Article 3.1.5.5. Since this would extend to required noncombustible high-rise buildings, and unsprinklered at that, I feel the risk is too great to accept proposed change #204.

C. A. C. Comments :

The Committee agrees this Sentence should be unchanged and prefers the approach proposed under amendments # 181.01 and 182.01.

18

Code Reference 3.1.5.5.(9)

Proposal or Chall./Amend. Ref. No. 203

Proposal :

C. A. C. Recommendation ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The committee had problems in accepting the phrase " a recognized independant and certification agency ". This phrase could be subject to all sorts of interpretation problems and could be difficult to comply with in the more remote areas of the Province.

The proposal was **amended** as follows:

Delete the phrase: "a recognized independant and certification agency "
and **substitute**: " an agency acceptable to the *authority having jurisdiction* ".

18.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 203.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Disapprove proposal :
Do not add new Sentence 3.1.5.5.(9) as proposed.

Reason:

Requiring in the text of the Code that a particular item, in this case, a wall assembly, be inspected and certified by a recognized independent inspection and certification agency is a complete departure from the manner in which the Code is presently written. To require such certification would necessitate similar requirements for the majority of the items appearing in the Code and would become rather cumbersome. The Code administrators have within their jurisdiction the authority to require evidence (ie. label on product from a nationally recognized agency) that a particular product will perform as required. In fact, because of the importance of quality control, Appendix A-3.1.5.5.(1) Combustible Cladding includes the following statement to assist code users: "These requirements are predicated upon the assumption that the manufacturing process and field installation procedure are both carried out under an independent quality assurance program designed to confirm that the product and its application are consistent with the system as tested".

C. A. C. Comments :

The Committee prefers the inclusion of the amended proposal.

19

Code Reference 3.1.5.5.(9)

Proposal or Chall./Amend. Ref. No. 351

Proposal :

C. A. C. Recommendation ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The committee had problems in accepting the phrase " a recognized independant and certification agency ". This phrase could be subject to all sorts of interpretation problems and could be difficult to comply with in the more remote areas of the Province.

The proposal was **amended** as follows:
Delete the phrase: "a recognized independant and certification agency "
and **substitute**: " an agency acceptable to the *authority having jurisdiction* ".

19.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 351.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Disapprove proposal :
Do not add new Sentence 3.1.5.5.(9) as proposed.

Reason:

Requiring in the text of the Code that a particular item, in this case, a wall assembly, be inspected and certified by a recognized independent inspection and certification agency is a complete departure from the manner in which the Code is presently written. To require such certification would necessitate similar requirements for the majority of the items appearing in the Code and would become rather cumbersome. The Code administrators have within their jurisdiction the authority to require evidence (ie. label on product from a nationally recognized agency) that a particular product will perform as required. In fact, because of the importance of quality control, Appendix A-3.1.5.5.(1) Combustible Cladding includes the following statement to assist code users: "These requirements are predicated upon the assumption that the manufacturing process and field installation procedure are both carried out under an independent quality assurance program designed to confirm that the product and its application are consistent with the system as tested".

C. A. C. Comments :

The Committee prefers the inclusion of the amended proposal.

20

Code Reference 3.1.5.5.(9)

Proposal or Chall./Amend. Ref. No. 182

Proposal :

C. A. C. Recommendation ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The committee had problems in accepting the phrase " a recognized independant and certification agency ". This phrase could be subject to all sorts of interpretation problems and could be difficult to comply with in the more remote areas of the Province.

The proposal was **amended** as follows:
Delete the phrase: "a recognized independant and certification agency "
and **substitute**: " an agency acceptable to the *authority having jurisdiction* ".

20.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **182.01**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept as amended***

Amend as follows:

3.1.5.5.(9) EIFS Building Envelopes and EIF Systems over concrete that satisfy the criteria set out in Sentence (1) and that also will remain in place for not less than 15 minutes when tested in conformance with CAN 4-S101-M "Standard Methods of Fire Endurance Tests of Building Construction and Materials", shall be acceptable for use on buildings over 6 storeys, and shall be considered as satisfying the requirements of Article 3.2.3.7.(3). (See Appendix A.)

Add in Appendix A :

A- 3.1.5.5.(9) An EIFS Building Envelope is defined as an exterior non-structural wall enclosure system with noncombustible framing members at maximum 600 mm on centre and a layer of exterior grade gypsum board (12.7 mm minimum thickness), or equivalent fire-rated sheathing, mechanically attached. The sheathing is clad with an EIF System consisting of fire-retardant treated foamed plastic insulation (76 mm maximum thickness) bonded or mechanically fastened to the substrate and coated with a synthetic stucco (4 mm minimum thickness) reinforced with a glass fibre mesh.

Reason:

(See document "Submission of Amendment to #181 & 182 -A thru Y.)

C. A. C. Comments :

The Committee accept this proposal **amended** as follows:

3.1.5.5.(10) EIF Systems over masonry or concrete and EIFS *Building* Envelopes that satisfy the criteria set out in Sentence (1), except for *building height*, and also will remain in place for not less than 15 minutes when tested in conformance with CAN4-S101-M " Standard Methods of Fire Endurance Tests of Building Construction and Materials", shall be acceptable for use on *sprinklered buildings* over 6 *storeys* in *building height* and shall be considered as satisfying the requirements of Sentence 3.2.3.7.(3). (See Appendix A).

A-3.1.5.5.(10) EIF Systems. An Exterior Insulation Finish System (EIFS) Building Envelope is defined as an exterior non-structural wall enclosure system with non-combustible framing members at maximum 600 mm on centre and a layer of exterior grade gypsum board (12.7 mm minimum thickness), or equivalent fire rated sheathing, mechanically attached. The sheathing is clad with an EIF System consisting of fire-retardant treated foamed plastic insulation (76 mm maximum thickness) bonded or mechanically fastened to the substrate and coated with a synthetic stucco (4 mm minimum thickness) reinforced with a glass fibre mesh.

20.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **182.02**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Disapprove proposal :

Do not add new Sentence 3.1.5.5.(9) as proposed.

Reason:

Requiring in the text of the Code that a particular item, in this case, a wall assembly, be inspected and certified by a recognized independent inspection and certification agency is a complete departure from the manner in which the Code is presently written. To require such certification would necessitate similar requirements for the majority of the items appearing in the Code and would become rather cumbersome. The Code administrators have within their jurisdiction the authority to require evidence (ie. label on product from a nationally recognized agency) that a particular product will perform as required. In fact, because of the importance of quality control, Appendix A-3.1.5.5.(1) Combustible Cladding includes the following statement to assist code users: "These requirements are predicated upon the assumption that the manufacturing process and field installation procedure are both carried out under an independent quality assurance program designed to confirm that the product and its application are consistent with the system as tested".

C. A. C. Comments :

The Commitee prefers the version of this Sentence as covered by amended proposals # 182.01 and #182.03

20.3
Code Reference See above
Proposal or Chall./Amend. Ref. No. 182.03
Challenge/ Amendment :
C. A. C. Recommendation *Accept as amended*

Amend as follows:
Add new Sentence :
3.1.5.5.(9). A wall assembly permitted by Sentence (1) shall be inspected and certified to the requirements of this Article by a recognized independent inspection and certification agency.

Reason:

Although a large majority of systems covered by this Code section are prepared on site, many products are delivered to a job location ready for installation. If the intent of this section is to establish additional field certification of materials, it seems that universal application of such a requirement is unnecessary. Products manufactured prior to delivery may be inspected and certified at the manufacturing facility in order to accomplish the same purpose. We agree that where mixing or other field preparations are required this Code change will help in assuring product consistency, but to universally require field inspection for all materials seems unjustified and redundant.

For products that are prepared on site a revised version of the proposed amendment might read:

A wall assembly which requires mixing of components or other field preparation permitted by Sentence (1) shall be inspected as applied in the field and certified to the requirements of this Article by a recognized inspection and certification agency.

This wording would asure product consistency and eliminate some of the variability inherent in field application.

Regardless of the wording used, the proposed amendment is an attempt to emphasize what is explained in paragraph 3 of A-3.1.5.5.(1). If the purpose of this change is intended to incorporate this concept into the Code, the change must not only specifically indicate requirements for field certification, but must also require an independent quality assurance program at the manufacturing facility to ensure product consistency.

C. A. C. Comments :

The committee had problems in accepting the phrase " a recognized independant and certification agency ". This phrase could be subject to all sorts of interpretation problems and could be difficult to comply with in the more remote areas of the Province.

The proposal was **amended** as follows:
Delete the phrase: "a recognized independant and certification agency "
and **substitute**: " an agency acceptable to the *authority having jurisdiction* ".

21
Code Reference 3.1.5.8
Proposal or Chall./Amend. Ref. No. 86
Proposal :
C. A. C. Recommendation *Accept as amended*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accept this proposal **amended** as follows:
Add the following after the word " faced " : " on both sides "

The Committee accepts that provided the panels are faced both sides with noncombustible material there is no problem with having wood cores in these raised floors.

21.1
Code Reference See above
Proposal or Chall./Amend. Ref. No. 86.01
Challenge/ Amendment :
C. A. C. Recommendation *Reject*

Disapprove proposal :

Reason:

Although not totally in disagreement with the suggested change, without a "Standard" the wording proposed would cause difficulty in interpretation and application.

In the "reason" a reference is made to a product with a ULC test. It seems without clarification and limitation such as a reference standard, fire stopping of conceal spaces or sprinkler requirements for the space, if building is required to be sprinkler, confusion and various different application will occur.

All sorts of combination of materials will occur as long as the "face" of the material is noncombustible. Not clear enough wording of the requirement of the "faced" material. This would be limited to "wood" core no other combustible material.

C. A. C. Comments :

The Committee prefers the inclusion of the amended proposal.

22
Code Reference 3.1.5.8.(4)
Proposal or Chall./Amend. Ref. No. 184
Proposal :
C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee rejected this proposal after giving careful consideration to the ramifications of adding such a system directly into the code. The Committee considers this type of system should not be part of the basic code requirements but should continue to be considered under the code equivalency provisions by the authority having jurisdiction .

22.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 184.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

This appears to be a proprietary product that, if part of the structure of the building and/or supports human activities of any kind, it should be considered as a mezzanine and, therefore, all appropriate requirements of the Code, including noncombustibility and fire-resistance, should apply. If this product is simply a storage rack and does not support any human activities, it is "furniture" and should not be regulated by the Code, although the appropriate sprinkler requirements would apply.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

22.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 184.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

This proposal appears to relate to a proprietary storage system which is one of at least three types that are available. Currently, all three systems would have to be dealt with under Article 2.5 on an equivalency basis. These systems are sufficiently different that adoption of this and related proposals could put the other systems at a significant marketing disadvantage. It would be better to incorporate an automatic detection, suppression and exiting requirements that would be applicable to all three systems rather than write the specific features of one system into the Code.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

23

Code Reference 3.1.5.10.(1).

Proposal or Chall./Amend. Ref. No. 277

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers the proposed change is not justified on the basis of past performance of combustible finishes in noncombustible construction.

23.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 277.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

This proposal should be rejected because it would prohibit painting or use of similar finishes on wood doors, door frames, window frames and other combustible elements commonly used in buildings required to be of noncombustible construction.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

23.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 277.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :
Retain existing wording.

Reason:

The Appendix makes clear that 3.1.5.2.(1)(b) applies to factory papered wallboards as opposed to coverings applied after installation which are addressed in 3.1.5.10.(1).

If the proposal is accepted many suitable coatings would be prohibited.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

24

Code Reference 3.1.5.10.(2).

Proposal or Chall./Amend. Ref. No. 276

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers the proposed change is not justified on the basis of past performance of combustible finishes in noncombustible construction.

24.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 276.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Amend the proposal Clause 3.1.5.10.(2)(b) as follows:
Delete the wording after " surface," and substitute as follows:
" . Surfaces that are exposed by cutting in any direction should be butted tightly together or protected by a fire resistant material or coating. "

Reason:

It is not practical to avoid cutting material during installation. Fire propagation can be avoided by tightly butting cut surfaces together or butting the cut edge against a frame or holding system. Alternatively these edges could be protected with a fire resistant coating.

C. A. C. Comments :

The Committee do not agree with this amendment.

24.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 276.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :
Retain existing wording.

Reason:

Existing wording for (b) is grammatically correct.

Interior combustible wall finishes need not be restricted to sprinklered compartments. The requirements already limit flame spread rating. It is the contents of a compartment which characteristically fuel a fire to flashover, not the structural elements regulated here. A "rabbit warren" of combustible dividers cannot be eliminated by the Building Code. The existing controlled use of combustible finishes is well established.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

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25 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 85

Proposal : 3.1.5.12. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee do not consider the use of wood partitions within the parameters specified in the N.B.C. a problem but is against the removal of the compartment area restriction and the alternate sprinklering requirement.

25.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 85.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

(See document #85-A.)

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

25.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 85.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

Considering that the building is required to be of non-combustible construction to begin with and that proposal #85 would permit combustible exit stair shafts, and considering the imperfections of construction practice in " the field ", I consider the proposed change to be too risky, especially in non-sprinklered buildings.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

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26 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 275

Proposal : 3.1.5.12.(1). **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers the proposed change is not justified on the basis of past performance of combustible finishes on wood partitions in noncombustible construction.

26.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 275.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :
Retain existing wording.

Reason:

The majority of the fuel load is contributed by the contents, framing represents only about 5%. There have been no difficulties todate with this Sentence, which provides a performance based requirement equitably applied to all occupancies. Inherently, these partitions are finished with gyproc or other noncombustible finishes even though the partition is not required to have a rating. Wood finishes are used in some instances with no poor fire experience.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

27

Code Reference 3.1.7.1.(2)

Proposal or Chall./Amend. Ref. No. 291

Proposal :

C. A. C. Recommendation ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

This addition should clarify any misunderstanding regarding acceptance of the ratings in the Part 9 Tables in Part 3 buildings.

28

Code Reference 3.1.7.3.

Proposal or Chall./Amend. Ref. No. 301

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers this proposal would have little effect since most of the ceiling panels in general use already exceed the minimum mass proposed.

29

Code Reference 3.1.8.2.

Proposal or Chall./Amend. Ref. No. 109

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

There may be an inequality in the code at present but this solution would almost eliminate framed construction. Past performance of combustible fire separations does not indicate justification for this change.

29.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 109.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

The original intent of this Sentence was to provide additional protection to a separation of such importance that it was required to be non-combustible. There are many problems with this approach:-

i.e.- how to construct a partition to not impinge upon the floor below when the partition falls;
- definition of the term "abuts";
- how to assess potential for damage.

The existing regulation is not well crafted and should not be extended to more situations as this proposal would have it. Other regulations cover support and collapse of fire rated separations (3.1.7.6.)

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

29.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 109.02

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Support the proposal:

Reason:

To remove the distinction between combustible and noncombustible supports gets back to a performance standard. Whether the support is combustible or noncombustible, the supported assembly should not be permitted to collapse because of its supports.

C. A. C. Comments :

There may be an inequality in the code at present but this solution would almost eliminate framed construction. Past performance of combustible fire separations does not indicate justification for this change.

30

Code Reference 3.1.8.5.

Proposal or Chall./Amend. Ref. No. 8

Proposal :

C. A. C. Recommendation ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal with the following re-wording:

(4) Every door used as a *closure* with a required *fire protection rating* shall have a permanent sign acceptable to the *authority having jurisdiction*, posted on the visible side of the door when it is in the open position, with the words " FIRE DOOR KEEP CLOSED " except where the door is

a)located between a corridor and an adjacent sleeping room in hospitals or nursing homes,
b) located between a corridor and an adjacent classroom,
c) located between a *public corridor* and a *suite* of Group C or D occupancy, or
d) fitted with an acceptable hold - open device designed to be released by a signal from a fire detector, fire alarm system or sprinkler system.

See Appendix A Article A-3.1.8.5.(4))

Add Appendix Sentence as follows:

A-3.1.8.5.(4) Signs Signs should be permanent and have letters and background in contrasting colours. The individual letters should be a minimum height of 6 mm.

31

Code Reference 3.1.8.9.(1).

Proposal or Chall./Amend. Ref. No. 283

Proposal :

C. A. C. Recommendation ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The connection between these two Articles should be more obvious with this added cross reference.

32

Code Reference 3.1.8.15.

Proposal or Chall./Amend. Ref. No. 289

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers the proposal would result in greater confusion over application of this Table.

33

Code Reference 3.1.8.17.(1)

Proposal or Chall./Amend. Ref. No. 294

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The proposal does not achieve the stated objective.

34

Code Reference 3.1.9.1.(1).

Proposal or Chall./Amend. Ref. No. 260

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers these requirements should remain in the Building Code which is the prime control document for safety in construction.

34.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 260.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

This is a Building Fire Safety requirement. It should stay in the Building Code. This comment could be referenced in the Electrical Code. If this proposal is accepted, the Building Inspector would have to carry 2 Code books to the job site, not one as he does now.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

34.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 260.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

(See document #260-A thru Y.) also (See document #260 & 261-B.)

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

34.3

Code Reference See above

Proposal or Chall./Amend. Ref. No. 260.03

Challenge/ Amendment :

Disapprove proposal :
Do not amend Sentences.

C. A. C. Recommendation ***Accept***

Reason:

These requirements relate to other requirements in the Building Code that are not described in the Electrical Code. The Electrical Code deals with methods of installation and does not cover what types of materials are acceptable in what types of buildings or locations within buildings. If the electrical specification is written properly, contractors and tradesmen should not have to read the Building Code to find out if a particular cable, fixture box, etc. is acceptable.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

34.4

Code Reference See above

Proposal or Chall./Amend. Ref. No. 260.04

Challenge/ Amendment :

Disapprove proposal :

C. A. C. Recommendation ***Accept***

Reason:

There is certainly no harm in adding a similar requirement to the Electrical Code, but the requirement relates to the building more so than to electrical safety. Hence I feel it should remain in the Building Code.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

35

Code Reference 3.1.9.2.

Proposal or Chall./Amend. Ref. No. 261

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation ***Reject***

C. A. C. Comments :

The Committee considers these requirements should remain in the Building Code which is the prime control document for safety in construction.

35.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 261.01

Challenge/ Amendment :

Disapprove proposal :

C. A. C. Recommendation ***Accept***

Reason:

This is a Building Fire Safety requirement. It should stay in the Building Code. This comment could be referenced in the Electrical Code. If this proposal is accepted, the Building Inspector would have to carry 2 Code books to the job site, not one as he does now.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

35.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 261.02

Challenge/ Amendment :

Disapprove proposal :

C. A. C. Recommendation ***Accept***

Reason:

(See document #260-A thru Y.) also (See document #260 & 261-B.)

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

35.3

Code Reference See above

Proposal or Chall./Amend. Ref. No. 261.03

Challenge/ Amendment :

Disapprove proposal :
Do not amend Sentences.

C. A. C. Recommendation ***Accept***

Reason:

These requirements relate to other requirements in the Building Code that are not described in the Electrical Code. The Electrical Code deals with methods of installation and does not cover what types of materials are acceptable in what types of buildings or locations within buildings. If the electrical specification is written properly, contractors and tradesmen should not have to read the Building Code to find out if a particular cable, fixture box, etc. is acceptable.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

35.4 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **261.04**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

There is certainly no harm in adding a similar requirement to the Electrical Code, but let's not delete it from the Building Code. The requirement relates to building fire safety, rather than to electrical safety.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

36 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **280**

Proposal : 3.1.15.1. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee do not agree with the stated reason for consolidating these two Articles as they presently follow code layout format and they also consider roof classification is related to spatial separation.

37 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **225**

Proposal : 3.2.1.1.(3)(b). **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Comittee considers the present wording adequate and they have no problem with the use of clear glass to enclose this area. The question of curtains or any other user controlled obstructions obscuring this opening is not controlled by the Building Code and could occur with or without glazing.

38 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **88**

Proposal : 3.2.1.1. (4) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

After much debate the Committee decided to leave the Clause "as is" as there are advantages and disadvantages with both methods.

38.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **88.01**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

The conditions affecting life safety and firefighting operations relative to mezzanines are determined solely by the room or suite in which the mezzanine is located, not the building as a whole. This proposal should be rejected because it would permit in some cases, a suite to contain a full "second storey" which is clearly not consistent with the intent of the Code.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

38.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **88.02**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

This would be a backward step, as the 1985 NBC did refer to "storey". A change was made to the 1985 B.C. Building Code to "suite". The reason for the change to "suite" is the same as the reasons given in the proposed change to "storey". To ensure that the enclosed mezzanine would not exceed 10% of the suite in which it is located and if it did the building would be classified as two storey and the construction may change.

With the proposed wording and the wording in the 1985 NBC, 10% of the storey could be the total area of a tenant space, enclosed as a two storey unit. This would prevent any other tenant spaces from having a mezzanine and create a situation where the mezzanine would be the total area of the unit without separations between the floor or protection of exits.

An additional storey that may affect the construction type of the building, where a suite is totally enclosed with a mezzanine yet less than 10% of the storey, is what was intended with the change to the 1985 B.C. Building Code. The small percentage (under 10%) could be large in area where a large building is involved and would impact on life safety.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

38.3

Code Reference See above

Proposal or Chall./Amend. Ref. No. 88.03

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

__Disapprove__ proposal :

Reason:

The proposed change would permit the 90 square metre mezzanine used as an example in the proponent's reasons for proposed change to be totally enclosed for its full 90 square metre area (if the area of the storey were 900+ square metres).

A mezzanine must be __open,__ within a suite and within the __room__ in which it is located, for the safety of the occupants on the mezzanine.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

39

Code Reference 3.2.1.1.(6).

Proposal or Chall./Amend. Ref. No. 288

Proposal :

C. A. C. Recommendation ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

Committee was unanimous on acceptance of this proposal.

40

Code Reference 3.2.1.2.

Proposal or Chall./Amend. Ref. No. 217

Proposal :

C. A. C. Recommendation ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal __amended__ as follows:

3.2.1.2. Storage Building Considered as a Separate Building.

(1) Where a *basement* is used primarily as a *storage garage*, the *basement* is permitted to be considered as a separate *building* for the purposes of Subsection 3.2.2. provided

(a) the floor above the *basement* is constructed as a *fire separation* of masonry or concrete having a *fire-resistance rating* of not less than 2 h,

(b) the portion of exterior wall of the *basement* located within 3 m on either side of any firewall located immediately above the *basement*, shall be constructed of masonry or concrete having a fire-resistance rating of at least 2 h and have no *unprotected openings*, and

(c) the *exposing building face* above the *basement* shall be protected from openings in the exterior walls of the *basement* by an apron or spandrel wall conforming to Subclause (i) or by a canopy conforming to Subclause (ii).

(i) Apron and spandrel walls shall be constructed of masonry or concrete not less than 1 m high, have a *fire resistance rating* not less than 2 h, shall extend the full width of the *basement* openings and to at least 1 m on either side and shall have no *unprotected openings*.

40.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 217.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows:

Retain the current Article as Sentence 3.2.1.2.(1) and add the following :

(2) Unprotected openings shall be permitted in the exterior walls of the basement in Sentence (1) provided

(a) the building above the basement is set back 1 m from the wall in which the opening occurs,

(b) a noncombustibile canopy having a fire-resistance rating of not less than 2 h, projecting out from the face of the wall not less than 1 m and extending not less than 1 m on each side of the opening, is located directly over the opening, or

(c) a noncombustible spandrel having a fire-resistance rating of not less than 2 h, not less than 1.5 m high and extending not less than 1 m on each side of the opening, is located directly over the opening.

Reason:

It appears that the main intent of the proposed change is simply to avoid having to provide rated closures in the basement walls. However, the proposed change does not seem to fulfil the intent of the current code requirement which is to separate a basement storage garage from the remainder of the building so that they can be considered as two separate buidings.

The intent of the current requirement is very clear and it should not be changed. If the need to provide protection for openings is the only concern, it may be possible to achieve an equivalent degree of safety through the use of properly sized and located noncombustible fire-resistance rated canopies or spandrels.

A noncombustible fire-resistance rated canopy projecting out 1 m from the wall face or a 1.5 m spandrel, both immediately above the opening and both extending 1 m on each side of the opening, should suffice.The canopy dimenson is equal to that of Article 3.2.3.17. andf should be adequate. Although 3.2.3.17. requires only a 1 m spandrel, recent testing at N.R.C. indicates that this dimension may not be adequate to stop the vertical spread of fire. Full scale exterior wall flame spread tests carried out at NRC showed that flames from a severe fire, venting through an opening, could reach up to 2 m above the top of the opening, on a noncombustible wall. Assuming that some of the upper part of the observed flaming is incipient, as is assumed for Sentence 3.1.5.5.(5), a spandrel extending 1.5 m directly above the opening should be adequate.

C. A. C. Comments :

The Committee considers this amendment should be rejected.

40.3 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **217.02**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Disapprove proposal :

Reason:

Whereas I support the general thrust of #217, I do not support the specific proposal to accept a 1 m apron.

I was at a presentation by the researcher at the NRC, who conducted tests within the last year of the effects of fire emanating from exterior wall openings. It was demonstrated that a 1 m apron falls far short of the performance of a 1 m projecting "canopy".

Another "equivalent" to existing NBC 3.2.1.2., and to proposed change #217 would be to set the wall of the building back from the face of the basement below. The NBC Standing cCmmittee on Fire Protection is expected to propose a change for the 1995 NBC.

C. A. C. Comments :

The Committee considers this amendment should be rejected.

41 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **196**

Proposal : 3.2.1.2. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers the term "permitted openings " is open to too many interpretations.

41.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **196.01**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Amend the proposal as follows :

Retain the current Article as Sentence 3.2.1.2.(1) and add the following :

(2) Unprotected openings shall be permitted in the exterior walls of the basement in Sentence (1) provided

(a) the building above the basement is set back 1 m from the wall in which the opening occurs,

(b) a noncombustibile canopy having a fire-resistance rating of not less than 2 h, projecting out from the face of the wall not less than 1 m and extending not less than 1 m on each side of the opening, is located directly over the opening, or

(c) a noncombustible spandrel having a fire-resistance rating of not less than 2 h, not less than 1.5 m high and extending not less than 1 m on each side of the opening, is located directly over the opening.

Reason:

It appears that the main intent of the proposed change is simply to avoid having to provide rated closures in the basement walls. However, the proposed change does not seem to fulfil the intent of the current code requirement which is to separate a basement storage garage from the remainder of the building so that they can be considered as two separate buidings.

The intent of the current requirement is very clear and it should not be changed. If the need to provide protection for openings is the only concern, it may be possible to achieve an equivalent degree of safety through the use of properly sized and located noncombustible fire-resistance rated canopies or spandrels.

A noncombustible fire-resistance rated canopy projecting out 1 m from the wall face or a 1.5 m spandrel, both immediately above the opening and both extending 1 m on each side of the opening, should suffice. The canopy dimenson is equal to that of Article 3.2.3.17. andf should be adequate. Although 3.2.3.17. requires only a 1 m spandrel, recent testing at N.R.C. indicates that this dimension may not be adequate to stop the vertical spread of fire. Full scale exterior wall flame spread tests carried out at NRC showed that flames from a severe fire, venting through an opening, could reach up to 2 m above the top of the opening, on a noncombustible wall. Assuming that some of the upper part of the observed flaming is incipient, as is assumed for Sentence 3.1.5.5.(5), a spandrel extending 1.5 m directly above the opening should be adequate.

C. A. C. Comments :

The Committee have accepted an amendment to the original wording.

41.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **196.02**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Disapprove proposal :

Reason:

The proposal does not clarify how garage doors or other openings are permitted.

C. A. C. Comments :

The Committee have accepted an amendment to the original wording.

41.3 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **196.03**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

The proposed amendment "except for permitted openings in the exterior wall" would be very difficult to enforce. What is "permitted openings?" Permitted openings, "Permitted by Who?"

This proposal would be very difficult to interpret or enforce to determine what is a permitted opening.

It is suggested that Proposal #217 would resolve concerns of permitting openings in these exterior walls.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

41.4

Challenge/ Amendment : **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 196.04

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

- The proposed change of "except for permitted openings" means nothing. What is permitted? Nothing.
- One of the reasons for the proposed change is to clarify the wording of the code seems to be reasonably clear. It specifies that the basement walls must be constructed as "fire separations". This means that all openings must be "protected", including driveway entrances. The alternative is to use the equivalency provisions of Section 2.5. One alternative could be close- spaced sprinklers at the opening.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

42

Proposal : **Code Reference** 3.2.1.2. **Proposal or Chall./Amend. Ref. No.** 316

C. A. C. Recommendation *Accept*

** See Code Change Publication dated February 1991

C. A. C. Comments :

This proposal could solve many of the problems that have been encountered with this type of project.

43

Proposal : **Code Reference** 3.2.1.4.(1) **Proposal or Chall./Amend. Ref. No.** 303

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers this addition reference is unnecessary.

43.1

Challenge/ Amendment : **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 303.01

C. A. C. Recommendation *Reject*

Disapprove proposal :
add new Article 3.1.1.4. as follows:
3.1.1.4. Except where specifically stated, where two or more Articles applying to the same building element or assembly have different fire-resistance rating requirements, the more restrictive rating shall apply.

Reason:

Such a requirement is implied throughout the Code but putting a general statement in Section 3.1, or possibly some more appropriate location, could possibly clear up some misunderstandings and would be of more benefit than applying it to a specific Article, as it may apply to other Articles also

C. A. C. Comments :

The Committee rejected this amendment.

44

Proposal : **Code Reference** 3.2.2. **Proposal or Chall./Amend. Ref. No.** 322

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee could not accept this proposal as it consists of multiple code change proposals many of which are unacceptable.

44.1

Challenge/ Amendment : **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 322.01

C. A. C. Recommendation *Accept*

Amend the proposal as follows:
Disapprove all 7 proposed changes for #322, and
Amend Article 3.2.5.13. as follows:

3.2.5.13. Automatic Sprinkler Systems

(1) Except as provided by Sentences (2), (3), (4) and (5), where a sprinkler system is required, it shall be designed, constructed, installed and tested in conformance with NFPA 13, "Installation of Sprinkler Systems". (See Appendix A.)

(2) Where a sprinkler system is required in a one or two family dwelling or a mobile home, it shall be designed, constructed, installed and tested in conformance with NFPA 13D, "Installation of Sprinkler Systems in One and Two Family Dwellings and Mobile Homes," or NFPA 13, "Installation of Sprinkler Systems".

(3) Where a sprinkler system is required in a multi-family *residential occupancy* up to four stories in height it shall be designed, constructed, installed and tested in conformance with NFPA 13R, "Installation of Sprinkler Systems in Residential Occupancies up to Four Stories in Height", or NFPA 13, "Installation of Sprinkler Systems".

Renumber existing Sentences (2), (3) & (4) to become (4), (5) & (6).

Reason:

(See document #322-A & B.)

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

44.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **322.02**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

Fire deaths in single family dwelling units are caused by a smoldering fire in furnishing giving off toxic smoke gases. By the time the area temperature rises enough to set off even the quickest response sprinkler the occupants will be dead from smoke inhalation.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

44.3 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **322.03**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

Adoption of these proposals would mandate sprinklers in buildings not presently required to be sprinklered. Suggest these proposals be withdrawn for the reasons below.

The Associate Committee of the National Building Code of Canada has established a Task Group to report upon sprinkler requirement throughout Part 3 of the NBC. The Task Group anticipates that its report will be available by the Fall of 1992. I suggest that the proposed amendments be withheld pending the findings of the Task Group. In the meantime, it is suggested that the proponents of these changes submit the proposals to IRC for review by the Task Group. Arrangements may be made to give formal presentations to the Task Group by contacting IRC directly.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

44.4 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **322.04**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Amend the proposal as follows:

Delete Sentences (4), (6) and (7).

Reason:

1. Sentence (4) NFPA 13R contains clear guidance on the design of sprinkler systems protecting the non-residential areas located in these Group C buildings. Several exceptions are included in NFPA 13R but these are intended to provide for use of quick response and extended coverage sprinklers which otherwise may not be used; thereby increasing the cost and the complexity of the system design.
2. Sentences (6) & (7) - Building protected by sprinklers designed in accordance with 13 R will not for all intents and purposes allow conflagrations to develop. The building will be sprinklered in the areas where statistically it has been shown the majority of fires occur, e.g. the occupied areas of a building.

Adding the requirement for sprinklers in all concealed floor spaces and attics is inconsistent with the present requirements in NFPA 13. There are many combustible concealed spaces permitted by NFPA 13 to be unsprinklered.

Requiring the suite fire separations to extend to the roof will be impractical and costly especially when the partitions within the suite run perpendicular to the structural members e.g. joists or trusses. These concealed spaces will require to be firestopped in any case in accordance with Article 3.1.11.5.

Requiring sprinklers on the balconies could require use of anti-freeze systems or separate dry pipe systems which will add more cost to the installation. Again statistically, fires in exterior areas such as balconies are not shown as having a significant impact as loss of life or injury.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

44.5 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **322.05**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

(See document 322.05 A)

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

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45 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **185**

Proposal : 3.2.2.3.(1)(h) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee rejected this proposal after giving careful consideration to the ramifications of adding such a system directly into the code. The Committee considers this type of system should not be part of the basic code requirements but should continue to be considered under the code equivalency provisions by the authority having jurisdiction .

45.1

Code Reference
See above

Proposal or Chall./Amend. Ref. No. 185.01

C. A. C. Recommendation *Accept*

Challenge/ Amendment :
Disapprove proposal :

Reason:
This appears to be a proprietary product that, if part of the structure of the building and/or supports human activities of any kind, it should be considered as a mezzanine and, therefore, all appropriate requirements of the Code, including noncombustibility and fire-resistance, should apply. If this product is simply a storage rack and does not support any human activities, it is "furniture" and should not be regulated by the Code, although the appropriate sprinkler requirements would apply.

C. A. C. Comments :
The Committee agrees the original proposal should be rejected.

45.2

Code Reference
See above

Proposal or Chall./Amend. Ref. No. 185.02

C. A. C. Recommendation *Accept*

Challenge/ Amendment :
Disapprove proposal :

Reason:
This proposal appears to relate to a proprietary storage system which is one of at least three types that are available. Currently, all three systems would have to be dealt with under Article 2.5 on an equivalency basis. These systems are sufficiently different that adoption of this and related proposals could put the other systems at a significant marketing disadvantage. It would be better to incorporate an automatic detection, suppression and exiting requirements that would be applicable to all three systems rather than write the specific features of one system into the Code.

C. A. C. Comments :
The Committee agrees the original proposal should be rejected.

46

Code Reference
3.2.2.6.

Proposal or Chall./Amend. Ref. No. 227

C. A. C. Recommendation *Reject*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee considers this will cause enforcement problems

46.1

Code Reference
See above

Proposal or Chall./Amend. Ref. No. 227.01

C. A. C. Recommendation *Accept*

Challenge/ Amendment :
Disapprove proposal :

Reason:
There is insufficient need for this onerous requirement. The intent could be lost by designers placing long narrow buildings have the short face facing the street.

C. A. C. Comments :
The Committee agrees the original proposal should be rejected.

47

Code Reference
3.2.2.6.(1)

Proposal or Chall./Amend. Ref. No. 222

C. A. C. Recommendation *Reject*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee considers this will cause enforcement problems

47.1

Code Reference
See above

Proposal or Chall./Amend. Ref. No. 222.01

C. A. C. Recommendation *Accept*

Challenge/ Amendment :
Challenge proposal :

Reason:
This requirement is redundant and is already covered in Sentence 3.2.5.6.(1).

C. A. C. Comments :
The Committee agrees the original proposal should be rejected.

48

Code Reference
3.2.2.7.

Proposal or Chall./Amend. Ref. No. 46

C. A. C. Recommendation *Accept*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee considers that this proposal gives more control over balcony construction.

49 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 284

Proposal : 3.2.2.11.(2) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee do not consider this change is required.

50 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 186

Proposal : 3.2.2.16. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee rejected this proposal after giving careful consideration to the ramifications of adding such a system directly into the code. The Committee considers this type of system should not be part of the basic code requirements but should continue to be considered under the code equivalency provisions by the authority having jurisdiction .

50.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 186.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

This appears to be a proprietary product that, if part of the structure of the building and/or supports human activities of any kind, it should be considered as a mezzanine and, therefore, all appropriate requirements of the Code, including noncombustibility and fire-resistance, should apply. If this product is simply a storage rack and does not support any human activities, it is "furniture" and should not be regulated by the Code, although the appropriate sprinkler requirements would apply.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

50.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 186.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

This proposal appears to relate to a proprietary storage system which is one of at least three types that are available. Currently, all three systems would have to be dealt with under Article 2.5 on an equivalency basis. These systems are sufficiently different that adoption of this and related proposals could put the other systems at a significant marketing disadvantage. It would be better to incorporate an automatic detection, suppression and exiting requirements that would be applicable to all three systems rather than write the specific features of one system into the Code.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

51 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 118

Proposal : 3.2.2.22.(3) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

An unprotected noncombustible metal roof as permitted by this proposal would fail far quicker than a heavy timber roof which has an inherent resistance to fire, the Committee can therefore see problems with the proposal.

51.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 118.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Disapprove proposal : and delete current Sentence 3.2.2.22.(3)..

Reason:

Sentence 3.2.2.22.(3) requires that roofs have a 1 h fire-resistance rating. The fact that a type of construction is noncombustible does not imply that it has a 1 h fire-resistance rating. Unprotected steel construction has little inherent fire-resistance and should not be permitted to be used for roofs in buildings of this classification. Even heavy timber construction has an inherent fire-resistance of only 45 minutes, according to Article 3.1.4.5. Therefore, its use should be restricted to buildings where only 45 minutes is required for roofs. Other areas of the code which permit noncombustible construction in lieu of 45 minute fire-resistance ratings also need to be addressed.

C. A. C. Comments :

The Committee rejects this amendment proposal.

51.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 118.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

If this proposal is accepted then one should also accept unsprinklered combustible construction with 3/4 hour fire resistance rating in buildings less than 3,200 m2 in area to be consistent with equivalencies granted elsewhere in the code.

The proposal is another prescriptive anomaly in the code, equating an unrated assembly to one which maintains structural integrity in a fire. This is also inconsistent with 3.2.2.21. which restricts the area of such a building to as little as 1600 m2.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

51.3 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 118.03

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

No basis is provided for a non-fire rated roof in a building up to 3,200 square metres in building area.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

51.4 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 118.04

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

- Noncombustible construction does not equate to heavy timber construction.
- Article 3.2.2.22.'s starting position is that noncombustible construction is required to begin with.
- Heavy timber is an exception.
- Heavy timber construction has substantial sized members and connectors, and has an inherent degree of fire-resistance rating.
- Clause 3.2.2.22.(2)(c) requires a 1 hour rating for the roof.
- Unrated roof assemblies are risky for fire fighters ... whether or not noncombustible.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

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52 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 25

Proposal : 3.2.2.29. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not accept this proposal as currently most of these buildings are being built sprinklered without a code requirement.

52.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 25.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

A new ACNBC Joint Task Group has just been formed and it will study the impact on fire safety of the installation of sprinklers in buildings (other than houses) and their effect on other code requirements. Any future code changes regarding sprinklers should be based on the findings of this Task Group. **Therefore, no change should be made at this time.**

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

52.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 25.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal : Adoption of these proposals would mandate sprinklers in buildings not presently required to be sprinklered. Suggest these proposals be withdrawn for the reasons below.

Reason:

The Associate Committee of the National Building Code of Canada has established a Task Group to report upon sprinkler requirement throughout Part 3 of the NBC. The Task Group anticipates that its report will be available by the Fall of 1992. I suggest that the proposed amendments be withheld pending the findings of the Task Group. In the meantime, it is suggested that the proponents of these changes submit the proposals to IRC for review by the Task Group. Arrangements may be made to give formal presentations to the Task Group by contacting IRC directly.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

53 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **22**

Proposal : 3.2.2.34. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee could not accept this blanket requirement for all Group C occupancies to be sprinklered as many townhouse developments, triplexes etc. would be automatically included.

53.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **22.01**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

The ACNBC Joint Task Group of Mandatory Installation of Sprinklers in Houses which studied the issue of mandating sprinklers has recommended to the appropriate NBCC Standing Committees that sprinklers not be made mandatory in houses. As the majority of fire losses occur in single family homes, it is logical to assume that, if sprinklers are not warranted there, they should also not be mandated in other residential type occupancies. A new ACNBC Joint Task Group has just been formed and it will study the impact on fire safety of the installation of sprinklers in buildings (other than houses) and their effect on other code requirements. Any future code changes regarding sprinklers should be based on the findings of this Task Group. **Therefore, no change should be made at this time.**

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

53.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **22.02**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal : Adoption of these proposals would mandate sprinklers in buildings not presently required to be sprinklered. Suggest these proposals be withdrawn for the reasons below.

Reason:

The Associate Committee of the National Building Code of Canada has established a Task Group to report upon sprinkler requirement throughout Part 3 of the NBC. The Task Group anticipates that its report will be available by the Fall of 1992. I suggest that the proposed amendments be withheld pending the findings of the Task Group. In the meantime, it is suggested that the proponents of these changes submit the proposals to IRC for review by the Task Group. Arrangements may be made to give formal presentations to the Task Group by contacting IRC directly.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

53.3 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **22.03**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

Do not agree that all residential buildings should be required to be sprinklered. A recent report prepared by a Task Force appointed by the NRC on mandatory sprinklers of single family dwellings, recommended sprinklers should not be a mandatory requirement, but suggest Code changes, which would provide "trade-offs" and a choice. Recently another Committee was appointed to review the mandatory sprinklering of other buildings under the NBC. It is recommended without the input of the information from this Task Force, which have members from all levels of code writing and enforcement, that any changes to this requirement would be premature at this time. I would request that the Committee reject this proposal, until such time as the reports from the NRC is completed.

C. A. C. Comments :

The Committee agrees the original proposall should be rejected.

---

54 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **211**

Proposal : 3.2.2.35. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

Committee cannot see a problem with the future code requirement.

54.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 211.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :
Retain Article 3.2.2.35.

Reason:

The existing NBC permits unsprinklered 4 storey noncombustible residential buildings with:-

- building height not exceeding 4500 square metres;
- 1 hour structural fire resistance ratings;
- 1 hour suite to suite, and suite to corridor fire-resistance ratings;
- smoke detectors in corridors and heat detectors and smoke alarms in suites;
- fire alarms system;
- standpipe and hose system;
- a rated roof assembly.

This combination of fire safety protection measures affords security to these building occupants equal to that provided in other building classifications. Statistics show that life loss in residential occupancies occurs in the room of fire origin; this situation can be addressed by mandatory provision of aotromatic sprinklers. .....

(Continued see document 1 page)

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

54.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 211.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Challenge proposal:

Reason:

No technical basis is given for disallowing increased areas.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

55

Code Reference 3.2.2.36.

Proposal or Chall./Amend. Ref. No. 210

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee do not support deletion of this Article. Multiple mezzanine levels have not been a problem in the past i.e. we do not get 6 level framed construction at present so why should we get 8 levels under this Article. As an additional precaution the Committee has amended an alternative proposal to incorporate a maximum height reqirement.

55.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 210.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows:

- require maximum 3 level sprinklered buildings.
- All Group "C" occupancy buildings must be equipped with Fast Response Sprinklers in accordance with NFPA 13 and other NFPA referenced material.

Reason:

I am against buildings of wood frame construction being greater than levels, whether the building is sprinklered or not.

I feel that all multi-family dwellings must be sprinklered.

C. A. C. Comments :

The Committee could not support this amendment.

55.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 210.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept as amended***

Disapprove proposal :
Retain existing wording.

Reason:

It is entirely logical to assume that sprinklers and increased fire-resistance ratings increase the fire safety of a building. Appropriate allowances were thoroughly reviewed and approved by the NBCC Standing Committee.

If there is a concern with building height then a restriction to height in metres could be considered, as is done in the United States.

C. A. C. Comments :

The Committee accepts this submission **amended** as follows:

Delete the word " and " from the end of Clause 3.2.2.36.(1)(b) and **add** the word " , and " at the end of Clause 3.2.2.36.(1)(c)

Add new Clause 3.2.2.36.(1) (d) as follows:

(d) is not more than 9 m in height between *grade* and the upper most floor level.

55.3

Code Reference See above

Proposal or Chall./Amend. Ref. No. 210.03

Challenge/ Amendment :

C. A. C. Recommendation ***Accept as amended***

Challenge proposal :

Reason:

How can a four storey building be eight levels in height?
No technical basis is given for disallowing the increase to four storeys in building height.

C. A. C. Comments :

The Committee accepts this submission amended as follows:

Delete the word " and " from the end of Clause 3.2.2.36.(1)(b) and add the word " , and " at the end of Clause 3.2.2.36.(1)(c)

Add new Clause 3.2.2.36.(1) (d) as follows:

(d) is not more than 9 m in height between *grade* and the upper most floor level.

56

Code Reference 3.2.3.1.

Proposal or Chall./Amend. Ref. No. 87

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers the present wording is clearer.

57

Code Reference 3.2.3.5.

Proposal or Chall./Amend. Ref. No. 281

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee do not consider this proposal will improve the code.

57.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 281.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

The proposed change would permit openings in walls with a limiting distance of less than 1.2 m to be left unprotected. The intent of the current article is to ensure that openings are adequately protcted and it indicates that wired glass and glass block, although considered closures by definition, are not considered to be acceptable closures in this situation, regardless of the rating required. **Therefore, no change should be made at this time.**

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

57.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 281.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

As written, this removes the requirement for all openings in a wall with a limiting distance less than 1.2 m to be protected by a closure. I don't believe this is the intent. In referring to a similar proposal to 9.10.14.5., it seems to want to increase the use of closures so that all openings must be protected. If this proposal (281) has the same intent, then again it should not be adopted as requiring closures on all openings goes against the overall principle that as the clear space to the property line increases, the hazard decreases and more unprotected openings are allowed.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

57.3

Code Reference See above

Proposal or Chall./Amend. Ref. No. 281.03

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Challenge proposal :

Reason:

Wired glass or glass blocks can qualify as closures.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

58

Code Reference 3.2.3.7.

Proposal or Chall./Amend. Ref. No. 334

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee do not agree with this proposal as there have been no significant problems with current wording

58.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 334.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

Present requirements in terms of fire-resistance rating and type of construction are sufficient. It is the safety provided by the system which is important, not the material it is made of. Risks accruing to punctures and penetrations are common to all construction and material types.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

58.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 334.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Challenge proposal :

Reason:

No technical basis is provided for the use of masonry or concrete.

In reason 2, the situation described twith two walls is not a party wall per the definition of the Code.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

59

Code Reference 3.2.3.7.(4)

Proposal or Chall./Amend. Ref. No. 120

Proposal :

C. A. C. Recommendation ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this submission amended as follows:

" Sentences 3.2.3.7. (1) **and** or (2) "

59.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 120.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows:

(4) Where an exterior wall is required by Article 3.2.3.7. to have a *fire-resistance rating* and the wall is dependent on an abutting assembly or assemblies for lateral support, the assembly or assemblies providing that support shall have a *fire-resistance rating* not less than that of the exterior wall being supported.

Reason:

Such a requirement should apply to all rated exterior walls that require lateral support, not just tilt-up concrete walls. Collapse of a floor or roof in a fire can also result in the collapse of a wood or steel wall. All rated walls should be designed so that they remain in place for the duration of their assigned fire-resistance ratings. Also, the fire resistance ratings of supporting assemblies should not be waived in lieu of sprinklers.

Fire-resistance rating reductions are not permitted for the exterior walls where sprinklers are present. Since these walls rely on other members for support, those supporting assemblies should be treated the same as the wall in question.

C. A. C. Comments :

The Committee prefers the above amended version of the original proposal.

60

Code Reference 3.2.3.7.(4)

Proposal or Chall./Amend. Ref. No. 309

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers this proposal could cause problems with other forms of construction that have not been a problem in the field.

60.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 309.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows:

Delete and substitute as follows :

(4) Where an exterior wall is required by Article 3.2.3.7. to have a fire-resistance rating and the wall is dependent on an abutting assembly or assemblies for lateral support, the assembly or assemblies providing that support shall have a fire-resistance rating not less than that of the exterior wall being supported.

Reason:

In order for the wall to remain in place for the duration of its fire-resistance rating, the supporting assembly or assemblies must also remain in place. Therefore, the supporting assemblies fire-resistance ratings must be at least equal to that of the wall. As a reduction or waiver of the fire-resistance rating of the wall is not permitted in lieu of sprinklers, the supporting assemblies must also be equally rated, regardless of sprinkler protection.

Specifying that fire rated exterior walls be designed to resist some lateral force may be a good idea, but if it is required, it must apply to all exterior fire rated walls, not just those requiring lateral support.

C. A. C. Comments :

The Commiittee does not agree with this amendment as there have been no significant problems with current wording

60.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 309.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

This would impose unduly onerous requirements on roofs and floors which by 3.2.2. would not require a fire-resistance rating or sprinklering.

Editorial *(by challenger)* - An exterior wall is not required to be a fire separation (continuous or openings protected) so a more appropriate wording is "exterior wall that has a fire-resistance rating".

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

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61 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 218

Proposal : 3.2.3.14.(1) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

This change would negate the value of fire separations between compartments.

61.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 218.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Amend the proposal as follows :

Delete the phrase " 135 degrees or less " and **substitute** : " less than 135 degrees "

Reason:

It is common practice to plan buildings with 135 degree corners. Many of these situations involve strip malls where the frontages are mostly glass. The 135 degrees or less imposes severe limitations on exposure for suites adjacent to the 135 degree corner. the rule can be beaten by laying out the building with a corner of 135 00' 01" degrees. This seems ridiculous. The change proposed recognizes reality with no detriment to safety.

C. A. C. Comments :

The Commiittee does not agree with the original proposal or this amendment .

61.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 218.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

This proposal deletes the requirement for opening separation when the interior fire separations are not a consideration in determining the area of the EBF, and should be rejected because it threatens the integrity of suite separations and similar separations required by other Subsections of the Code.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

---

62 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 290

Proposal : 3.2.4.2.(1) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

This could cause problems with control of smoke through ducts between buildings.

62.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 290.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Retain existing wording.

Reason:

Ducts are normally larger than pipes, tubes and wiring and present a better path for the passage of smoke and flame. With the possibility of very large ducts, it is appropriate to have a continuous fire alarm system. The same reasoning is applied to 3.2.4.2.(4).

Perhaps a more appropriate action would be to limit the size of the penetration, regardless of its nature.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

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63 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 286

Proposal : 3.2.4.7.(1)(a) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

Committee considers this proposal does not improve the code.

63.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 286.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Challenge proposal :

Reason:

This rewording is redundant and a fire alarm system would be required for the situation described.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

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64 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 195

Proposal : 3.2.4.7.(1)(f) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agree there is problem but since senior citizen apartment is not defined enforcement could be a problem.

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65 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 313

Proposal : 3.2.4.11.(1). **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The term fire detector is not going to guarantee installation of a heat detector as advocated by proponent.

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66 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 311

Proposal : 3.2.4.12.(1) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

Committee considers this is already covered by Sentence 3.2.4.15.(1)

66.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 311.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Challenge proposal :

Reason:

This requirement would appear to require a detector in all lobbies. I do not support this change as this requirement is adequately covered under Sentence 3.2.4.15.(1).

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

---

67 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 310

Proposal : 3.2.4.12.(1) **C. A. C. Recommendation** ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

Committee agrees that code and CSA B44 should be consistant.

---

68 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 187

Proposal : 3.2.4.12.(2) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee rejected this proposal after giving careful consideration to the ramifications of adding such a system directly into the code. The Committee considers this type of system should not be part of the basic code requirements but should continue to be considered under the code equivalency provisions by the authority having jurisdiction .

68.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 187.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Disapprove proposal :

Reason:

This appears to be a proprietary product that, if part of the structure of the building and/or supports human activities of any kind, it should be considered as a mezzanine and, therefore, all appropriate requirements of the Code, including noncombustibility and fire-resistance, should apply. If this product is simply a storage rack and does not support any human activities, it is "furniture" and should not be regulated by the Code, although the appropriate sprinkler requirements would apply.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

68.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 187.02

C. A. C. Recommendation *Reject*

Challenge/ Amendment :

Disapprove proposal :

Reason:

This proposal appears to relate to a proprietary storage system which is one of at least three types that are available. Currently, all three systems would have to be dealt with under Article 2.5 on an equivalency basis. These systems are sufficiently different that adoption of this and related proposals could put the other systems at a significant marketing disadvantage. It would be better to incorporate an automatic detection, suppression and exiting requirements that would be applicable to all three systems rather than write the specific features of one system into the Code.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

69

Code Reference 3.2.4.15.(4)

Proposal or Chall./Amend. Ref. No. 92

C. A. C. Recommendation *Reject*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee do not consider this change necessary.

70

Code Reference 3.2.4.17.

Proposal or Chall./Amend. Ref. No. 295

C. A. C. Recommendation *Accept as amended*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee recommend acceptance of the following amended wording:-

3.2.4.17. Manual Pull Stations A manual pull station shall be installed near the principal entrance and on every *floor level* near every required *exit*.

71

Code Reference 3.2.4.17.

Proposal or Chall./Amend. Ref. No. 329

C. A. C. Recommendation *Reject*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers the wording of this proposal could result in an excessive number of pull stations having to be installed throughout floor areas.

72

Code Reference 3.2.4.21.(2)

Proposal or Chall./Amend. Ref. No. 61

C. A. C. Recommendation *Reject*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee consider locations in bedrooms do not solve problem of early detection of problem in living areas where many fires develop.

72.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 61.01

C. A. C. Recommendation *Accept*

Challenge/ Amendment :

Disapprove proposal :

Reason:

Taking the detectors out of the areas which have a high incidence of fires (Kitchen) and providing detection only in rooms where the doors could be closed seems to be a reduction in the level of safety. If the doors to the bedroom are closed a fire in the outer rooms of the apartment may grow to flashover conditions even before the detector in the bedroom operates.

False alarms are definitely a problem, mostly related to human attitude. This change seems to be a step in the wrong direction to try and correct a problem which is not 100% foolproof.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

73

Code Reference 3.2.4.21.(2)

Proposal or Chall./Amend. Ref. No. 315

C. A. C. Recommendation *Accept*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees this reference is required.

74

Code Reference 3.2.4.21.(6).

Proposal or Chall./Amend. Ref. No. 314

C. A. C. Recommendation *Reject*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The committee cannot support this proposal. The correct answer is to install a proper 2- stage alarm system in the building with smoke alarms in each suite as a local alarm.

74.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 314.01

C. A. C. Recommendation *Accept*

Challenge/ Amendment :

Disapprove proposal :

Reason:

Smoke alarms cannot be connected to the building's Fire Alarm System. Only smoke detectors can be connected to the fire alarm system. The submitter reason is not justified. Smoke alarms are not intended to be part of a fire alarm system.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

75

Code Reference 3.2.5.

Proposal or Chall./Amend. Ref. No. 5

C. A. C. Recommendation *Reject*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers this proposal as written could result in excessive sprinklering of buildings normally not required to be sprinklered.

75.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 5.01

C. A. C. Recommendation *Accept*

Challenge/ Amendment :

Disapprove proposal :

Reason:

As the proposed change is written using the word 'may', it does not belong as part of the Building Code. The Appendix can and does give guidance regarding the proposer's concerns, but it is not enforceable. Specific circumstances and requirements for additional measures would have to be included in order for such a change to the Code to be appropriate. Although it may be beneficial to give municipalities the authority to require additional measures where needed, unless specifics are stated, the Building Code is not the proper vehicle for doing this.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

76

Code Reference 3.2.5.4.

Proposal or Chall./Amend. Ref. No. 317

C. A. C. Recommendation *Reject*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers this is already better covered by N.F.P.A. 14

76.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 317.01

C. A. C. Recommendation *Reject*

Challenge/ Amendment :

Amend the proposal as follows:

Move Sentence to 3.2.5.10.(7) with a reference to Sentence 3.2.5.4.(1).

Reason:

Hydrants should be required only in buildings which have a standpipe system along with a requirement for roof access.

C. A. C. Comments :

The Committee did not agree with this amendment.

77

Code Reference 3.2.5.6.(1).

Proposal or Chall./Amend. Ref. No. 3

C. A. C. Recommendation *Reject*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

the Committee considers this could be very restrictive and inhibit development.

77.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 3.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :
Retain existing wording.

Reason:

For many property and principal entrance geometries and locations, this proposal is unreasonable. The existing wording provides reasonable access to principal entrances and is sufficient in the majority of cases.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

78 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 6

Proposal : 3.2.5.8. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee prefers the approach taken in proposal #1

78.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 6.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :
Retain existing wording.

Reason:

Fire Underwriters Survey requirements address property protection, not life safety as the Building Code does.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

78.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 6.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Challenge: proposal

Reason:

The Fire Underwriters Survey is an extremely conservative procedure for determining water supply and is very much open to wide interpretation.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

78.3 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 6.03

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

A.3 of the Code has already clarified that adequacy of water supply shall be determined by individual municipalities and regulated through local zoning bylaws. The FUS method for determiniation of water supplies was used to rate public fire protection for insurance purposes and should be compatible with the fire services provided. Blind application of the method may result in tremendous financial burden for municipalities to upgrade their water supply systems.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

79 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 44

Proposal : 3.2.5.8. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee prefers the approach taken in proposal #1

79.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 44.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

NFPA 1231 is difficult to interpret, is not based upon life safety and does not refer to the construction types used in Canadian Codes.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected, the approach taken in proposal #1 is preferred.

79.2
Code Reference See above
Proposal or Chall./Amend. Ref. No. 44.02
Challenge/ Amendment :
C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

A.3 of the Code has already clarified that adequacy of water supply shall be determined by individual municipalities and regulated through local zoning bylaws. The FUS method for determiniation of water supplies was used to rate public fire protection for insurance purposes and should be compatible with the fire services provided. Blind application of the method may result in tremendous financial burden for municipalities to upgrade their water supply systems.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected, the approach taken in proposal #1 is preferred.

80
Code Reference 3.2.5.9.(1)(e)
Proposal or Chall./Amend. Ref. No. 194
Proposal :
C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees there is problem but since senior citizen apartment is not defined enforcement could be a problem.

80.1
Code Reference See above
Proposal or Chall./Amend. Ref. No. 194.01
Challenge/ Amendment :
C. A. C. Recommendation ***Reject***

Amend the proposal as follows:

All Group "c" occupancy buildings must be equipped with Fast Response Sprinklers in accordance with NFPA 13 and other NFPA referenced material.

Reason:

All apartments, whether they are senior citizens' or other, must be sprinklered to NFPA requirements.

C. A. C. Comments :

The Committee did not agree with this amendment, as it would require sprinklering in all group C occupancies.

80.2
Code Reference See above
Proposal or Chall./Amend. Ref. No. 194.02
Proposal :
C. A. C. Recommendation ***Reject***

Amend the proposal :
Clarify wording, what is the intent?

Reason:

1. If a building is sprinklered and less than 14 m high, standpipes are not required.
2. In support of the proponent's reasoning, standpipes should be required in unsprinklered senior citizen apartments with areas greater than 1/2 that permitted in Table 3.2.5.A. (for Group C).

C. A. C. Comments :

The Committee did not agree with this amendment.

81
Code Reference 3.2.5.10.(6)
Proposal or Chall./Amend. Ref. No. 318
Proposal :
C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers this would cause further confusion in industry since would not tie in with N.F.P.A.

82
Code Reference 3.2.5.13.
Proposal or Chall./Amend. Ref. No. 89
Proposal :
C. A. C. Recommendation ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this submission **amended** as follows:

Amend Sentence 3.2.5.13. (1) to read :

(1) Except as provided in Sentences (2), (3) and (5), where ....

Add Sentence 3.2.5.13. (5) as follows:

(5) The sprinkler system may be designed, constructed, installed and tested in conformance with NFPA 13R, " Installation of Sprinkler Systems in Residential Occupancies up to Four Stories in Height " where the sprinkler system is required in a *building*

(a) classified as Group C not more than 4 *storeys* in *building height*, and not more than 9 m in height between *grade* and the upper most floor level.

82.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **89.01**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept as amended***

Amend the proposal as follows :

Add to the effect of "provided there are fire separations in attics between adjacent fire compartments, unless the fire separation is provided at the ceiling level".

Reason:

Subject to correction, I believe that U.S. Building Codes require this, and which NFPA 13-R pre-supposes.

C. A. C. Comments :

The Committee accepts this submission amended as follows:

Amend Clause 3.2.5.13. (5) (a) { See amended proposal # 89 } as follows :

Delete " . " and add " , and "

Add Clause3.2.5.13. (5)(b) as follows:

(b) in which the ceiling / roof assembly has a *fire-resistance rating* of not less than 1 h, or the vertical *fire separations* between *fire compartments* on the top *storey* terminate at the underside of the roof sheathing.

---

83 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **110**

Proposal : 3.2.5.13. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee do not consider proposed secondary system is any more viable in an earthquake situation than the primary system.

83.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **110.01**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :l

Reason:

If this proposal means that the "automatically available secondary on-site water supply", shall be stored as a volume of water on the site, the strongest of objections is hereby lodged on the basis of:-

- Prohibitive costs
- Spacial constraints
- Unproven integrity of storage devices and connections.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

83.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **110.02**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

This is not necessary or reasonable. All it is doing is doubling the cost of sprinkler water supply installation. Providing the building is equipped with a Fire Department Pumper Connection as laid out in NFPA 13. The Pumper Connection is more than adequate to provide a second source of water supply.

It is obvious this comment has been submitted by the Canadian Concrete and Masonry Codes Council, so as to increase the cost of sprinkler system installation.

NFPA 13 requires earthquake protection for the sprinkler system. The same water supply problem could occur for standpipe systems, as for sprinkler systems. Therefore, use the Fire Department Pumper connection.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

83.3

Code Reference See above

Proposal or Chall./Amend. Ref. No. 110.03

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

This proposal should be rejected for a number of reasons, including the following :

1. Recent experience does not indicate that sprinkler failures due to loss of municipal water supply were a significant factor in loss of life or injuries caused by fire following an earthquake. While it seems reasonable that some increase in property damage may occur due to such failures, the economic burden imposed by this proposal will undoubtedly result in fewer sprinklered buildings, and subsequently a far greater increase in property damage, death and injury due to fires not related to earthquakes.
2. The Code requirements for all buildings, sprinklered and unsprinklered, are based in part on an assumption that firefighting capabilities are available in the event of a fire emergency. If it is truly the intent of this proposal to protect against fire spread due to possible loss of the municipal water supply from earthquake, then the compensatory measures must be far broader than just a secondary water supply for sprinklered buildings. Such measures should include: doubling of all limiting distances; increased fire-resistance for structural elements and separations required for compartmentation, particularly for small buildings, and limitations on the use of combustible construction, combustible cladding, etc.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

83.4

Code Reference See above

Proposal or Chall./Amend. Ref. No. 110.04

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

Code requirements, including fire protection relaxations, are written with due consideration of risk. Certain emergency responses are assumed to be available. The risk cost/benefit of this proposal is not viable.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

84

Code Reference 3.2.5.13.

Proposal or Chall./Amend. Ref. No. 325

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

This is adequately covered by N.F.P.A.13.

85

Code Reference 3.2.5.17.(3).

Proposal or Chall./Amend. Ref. No. 320

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers this should be in the fire code.

86

Code Reference 3.2.5.18.

Proposal or Chall./Amend. Ref. No. 321

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

Since every eventuality cannot be covered by this list the subject is better covered by the performance requirements of NFPA 13

86.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 321.01

Challenge/ Amendment :

C. A. C. Recommendation *Reject*

Amend the proposal as follows:

Delete Clause (2)(a) and substitute as follows :

(a) have a minimum of RSI 2.1 (R12) insulation between the pipe and potentially freezing areas.

Add new Clause as follows :

(d) sprinkler shut off valves should be easily accessible to condominium maintenance personnel in case of a wet pipe failure.

Reason:

The word "sufficient" is open to wide interpretation. (I am aware of a wood frame condominium wet pipe system failure on December 20, 1990. The failure occurred in a wall space with only 1 1/2" of insulation between pipe and exterior wall cladding).

C. A. C. Comments :

The Committee have rejected the original proposal and this amendment

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86.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 321.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Challenge proposal :

Reason:

These guidelines are adequately dealt with under NFPA 13, "Standard for the Installation of Sprinkler Systems".

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

---

87 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 262

Proposal : 3.2.6.9.(6) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers these requirements should remain in the Building Code which is the prime control document for safety in construction.

87.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 262.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

This is a Building Fire Safety requirement. It should stay in the Building Code. This comment could be referenced in the Electrical Code. If this proposal is accepted, the Building Inspector would have to carry 2 Code books to the job site, not one as he does now.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

87.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 262.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Do not amend Sentences.

Reason:

These requirements relate to other requirements in the Building Code that are not described in the Electrical Code. The Electrical Code deals with methods of installation and does not cover what types of materials are acceptable in what types of buildings or locations within buildings. If the electrical specification is written properly, contractors and tradesmen should not have to read the Building Code to find out if a particular cable, fixture box, etc. is acceptable.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

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88 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 324

Proposal : 3.2.6.14.(1). **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers this proposal will still cause confusion.

88.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 324.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Challenge proposal :

Reason:

No technical reason is given for this change proposal. Wording under the 1990 NBC is satisfactory.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

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89 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 263

Proposal : 3.2.6.14. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers these requirements should remain in the Building Code which is the prime control document for safety in construction.

89.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 263.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

This is a Building Fire Safety requirement. It should stay in the Building Code. This comment could be referenced in the Electrical Code. If this proposal is accepted, the Building Inspector would have to carry 2 Code books to the job site, not one as he does now.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

89.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 263.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

These requirements relate to other requirements in the Building Code that are not described in the Electrical Code. The Electrical Code deals with methods of installation and does not cover what types of materials are acceptable in what types of buildings or locations within buildings. If the electrical specification is written properly, contractors and tradesmen should not have to read the Building Code to find out if a particular cable, fixture box, etc. is acceptable.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

90

Code Reference 3.2.7.2.

Proposal or Chall./Amend. Ref. No. 265

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers these requirements should remain in the Building Code which is the prime control document for safety in construction.

90.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 265.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

This is a Building Fire Safety requirement. It should stay in the Building Code. This comment could be referenced in the Electrical Code. If this proposal is accepted, the Building Inspector would have to carry 2 Code books to the job site, not one as he does now.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

90.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 265.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

These requirements relate to other requirements in the Building Code that are not described in the Electrical Code. The Electrical Code deals with methods of installation and does not cover what types of materials are acceptable in what types of buildings or locations within buildings. If the electrical specification is written properly, contractors and tradesmen should not have to read the Building Code to find out if a particular cable, fixture box, etc. is acceptable.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

91

Code Reference 3.2.7.4.

Proposal or Chall./Amend. Ref. No. 266

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers these requirements should remain in the Building Code which is the prime control document for safety in construction.

91.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 266.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

This is a Building Fire Safety requirement. It should stay in the Building Code. This comment could be referenced in the Electrical Code. If this proposal is accepted, the Building Inspector would have to carry 2 Code books to the job site, not one as he does now.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

91.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 266.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

These requirements relate to other requirements in the Building Code that are not described in the Electrical Code. The Electrical Code deals with methods of installation and does not cover what types of materials are acceptable in what types of buildings or locations within buildings. If the electrical specification is written properly, contractors and tradesmen should not have to read the Building Code to find out if a particular cable, fixture box, etc. is acceptable.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

92 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 269

Proposal : 3.2.7.5. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers these requirements should remain in the Building Code which is the prime control document for safety in construction.

92.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 269.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

This is a Building Fire Safety requirement. It should stay in the Building Code. This comment could be referenced in the Electrical Code. If this proposal is accepted, the Building Inspector would have to carry 2 Code books to the job site, not one as he does now.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

92.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 269.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

These requirements relate to other requirements in the Building Code that are not described in the Electrical Code. The Electrical Code deals with methods of installation and does not cover what types of materials are acceptable in what types of buildings or locations within buildings. If the electrical specification is written properly, contractors and tradesmen should not have to read the Building Code to find out if a particular cable, fixture box, etc. is acceptable.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

93 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 264

Proposal : 3.2.7.8.(6). **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers these requirements should remain in the Building Code which is the prime control document for safety in construction.

93.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 264.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

This is a Building Fire Safety requirement. It should stay in the Building Code. This comment could be referenced in the Electrical Code. If this proposal is accepted, the Building Inspector would have to carry 2 Code books to the job site, not one as he does now.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

93.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 264.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

These requirements relate to other requirements in the Building Code that are not described in the Electrical Code. The Electrical Code deals with methods of installation and does not cover what types of materials are acceptable in what types of buildings or locations within buildings. If the electrical specification is written properly, contractors and tradesmen should not have to read the Building Code to find out if a particular cable, fixture box, etc. is acceptable.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

94

Code Reference 3.2.8.2.(1)

Proposal or Chall./Amend. Ref. No. 287

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee consider the original intent to obtain the exemptions was a 500 m2 maximum on mezzanine total area irrespective of number of mezzanines.

95

Code Reference 3.3.1.3.(10)

Proposal or Chall./Amend. Ref. No. 302

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers this proposal is too broad in scope since almost anywhere in a floor area could be part of an access to exit.

96

Code Reference 3.3.1.4.(1)

Proposal or Chall./Amend. Ref. No. 219

Proposal :

C. A. C. Recommendation ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal amended as follows:
In Subclause (i) delete the word " unobstructed"

This conflicts with subclause (ii).

96.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 219.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Challenge proposal :

Reason:

This change is redundant. These requirements are adequately covered Sentence 3.3.1.9.(6).

C. A. C. Comments :

The Committee have accepted an amended version of the proposal.

97

Code Reference 3.3.1.4.(1)

Proposal or Chall./Amend. Ref. No. 116

Proposal :

C. A. C. Recommendation ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

Should solve some of the wheelchair manouvering problems at these locations.

98

Code Reference 3.3.1.5.

Proposal or Chall./Amend. Ref. No. 198

Proposal :

C. A. C. Recommendation ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal as it clarifies the original intent.

99

Code Reference 3.3.1.10.(1)

Proposal or Chall./Amend. Ref. No. 327

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers that this proposal is too broad in scope to be practical.

99.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 327.01

Challenge/ Amendment : See above **C. A. C. Recommendation** *Accept*

Disapprove proposal :

Reason:

This proposal would prohibit sliding doors for bathrooms, balconies and other locations within suites, although there is no evidence to suggest that such doors contribute significantly to fire deaths. The proposal would be rejected, or at least amended to permit sliding doors on rooms with a low occupant load.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

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100 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 207

Proposal : 3.3.1.11.(3) **C. A. C. Recommendation** *Accept as amended*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accept this proposal **amended** as follows:

Alter the last part of the Sentence as follows:

"......... provided the movable *partitions* are not located in the only *means of egress*."

100.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 207.01

Challenge/ Amendment : See above **C. A. C. Recommendation** *Reject*

Challenge proposal :

Reason:

No adverse fire history exists to support this suggested change. Provision of a man door in moveable partitions would be an extremely onerous and unnecessary cost.

C. A. C. Comments :

The Committee have accepted an amended version of the proposal.

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101 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 347

Proposal : 3.3.1.12. **C. A. C. Recommendation** *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers that this is already covered where required in the code.

---

102 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 134

Proposal : 3.3.1.12.(1) **C. A. C. Recommendation** *Accept*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers this proposal makes sense.

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103 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 349

Proposal : 3.3.1.12.(1) **C. A. C. Recommendation** *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee prefers the approach taken in proposal number 134

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104 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 341

Proposal : 3.3.1.12.(1). **C. A. C. Recommendation** *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee prefers the approach taken in proposal number 134

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105 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 68

Proposal : 3.3.1.15. **C. A. C. Recommendation** *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee do not consider this change is justified since there has been no reported problems with current wording

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105.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 68.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

Should only apply to required stairs.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

106 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 236

Proposal : 3.3.1.15. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers this proposal would be excessively restrictive.

106.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 236.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

Too restrictive and costly. All present stock plans would be eliminated. Cannot justify as most accidents on stairs happen from poor maintenance, worn carpets or damaged nosing.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

106.3 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 236.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Amend the proposal as follows :

That Article 3.3.1.15. be revised to delete stair types I and II (type II is the standard for stairs serving single dwellings). The proposal would reduce the maximum rise from 8" to 7 1/8", and increase the minimum run from 9" to 11". This would increase the total run of a standard flight of stairs (assuming 8' ceiling) from about 10' 6" to more than 14' 6".

Reason:

This amendment presents itself as being a concern by a percentage of our society that have a difficulty with managing stairs because of their foot size. We are curious as to why the 11" was deemed a more acceptable dimension over 9". The impact of this amendment is significant to design firms like ours, the builder, and the consumer.

In our case literally hundreds of designs would become unusable and the affect would be horrendous to use. It is a guesstimate, but likely in excess of 80% of stock designs in B.C. would not and could not comply without significant redrawing. This could virtually shut down the new house market.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

107 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 237

Proposal : 3.3.1.15. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

This proposal relates to proposal 236 which was rejected.

108 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 344

Proposal : 3.3.1.15.(2). **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The phrase " alter significantly" is open to all sorts of interpretations and could only cause problems in the field.

109 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 238

Proposal : 3.3.1.16. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers this to be only an editorial change which is not required.

110
Code Reference 3.3.1.16.(5).
Proposal or Chall./Amend. Ref. No. 350
Proposal :
** See Code Change Publication dated February 1991
C. A. C. Recommendation ***Reject***

C. A. C. Comments :
The Committee do not consider this change necessary.

111
Code Reference 3.3.1.16.
Proposal or Chall./Amend. Ref. No. 239
Proposal :
** See Code Change Publication dated February 1991
C. A. C. Recommendation ***Reject***

C. A. C. Comments :
The Committee do not consider the change to 8 mm has been substantiated . The equivalency option is always open .

112
Code Reference 3.3.1.16.
Proposal or Chall./Amend. Ref. No. 240
Proposal :
** See Code Change Publication dated February 1991
C. A. C. Recommendation ***Reject***

C. A. C. Comments :
The Committee do not consider this cross reference is required.

113
Code Reference 3.3.1.17.(1)
Proposal or Chall./Amend. Ref. No. 278
Proposal :
** See Code Change Publication dated February 1991
C. A. C. Recommendation ***Accept***

C. A. C. Comments :
The Committee accepts this proposal is technically correct.

114
Code Reference 3.3.2.3.
Proposal or Chall./Amend. Ref. No. 241
Proposal :
** See Code Change Publication dated February 1991
C. A. C. Recommendation ***Reject***

C. A. C. Comments :
The Committee considers this should be viewed under the Code's equivalency provisions.

115
Code Reference 3.3.2.4.(2).
Proposal or Chall./Amend. Ref. No. 242
Proposal :
** See Code Change Publication dated February 1991
C. A. C. Recommendation ***Reject***

C. A. C. Comments :
The Committee considers this proposal should be presented at the National level as they have more resources to undertake a full analysis of the implications.

116
Code Reference 3.3.2.4.(3).
Proposal or Chall./Amend. Ref. No. 243
Proposal :
** See Code Change Publication dated February 1991
C. A. C. Recommendation ***Reject***

C. A. C. Comments :
The Committee considers this proposal should be presented at the National level as they have more resources to undertake a full analysis of the implications.

117
Code Reference 3.3.2.4.(4).
Proposal or Chall./Amend. Ref. No. 244
Proposal :
** See Code Change Publication dated February 1991
C. A. C. Recommendation ***Reject***

C. A. C. Comments :
The Committee considers the current code requirement is easier to interpret.

118
Code Reference 3.3.2.4.(9).
Proposal or Chall./Amend. Ref. No. 246
Proposal :
** See Code Change Publication dated February 1991
C. A. C. Recommendation ***Reject***

C. A. C. Comments :
The Committee considers the current code requirement is easier to interpret.

119

Code Reference 3.3.2.4.(11)

Proposal or Chall./Amend. Ref. No. 245

C. A. C. Recommendation ***Reject***

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee considers the current code is adequate.

120

Code Reference 3.3.2.8. (1)

Proposal or Chall./Amend. Ref. No. 247

C. A. C. Recommendation ***Reject***

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee considers the current code is adequate and the additional wording would result in confusion.

121

Code Reference 3.3.2.9.

Proposal or Chall./Amend. Ref. No. 250

C. A. C. Recommendation ***Reject***

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee considers the current wording is adequate.

122

Code Reference 3.3.2.9.(3) (NBCC).

Proposal or Chall./Amend. Ref. No. 248

C. A. C. Recommendation ***Reject***

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The current code wording has not resulted in enforcement or design problems.

123

Code Reference 3.3.2.9.(4)

Proposal or Chall./Amend. Ref. No. 249

C. A. C. Recommendation ***Reject***

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee considers this is already covered by the equivalency provisions of the code.

123.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 249.01

C. A. C. Recommendation ***Accept***

Challenge/ Amendment :
Disapprove proposal :

Reason:
This revision to Sentence 3.3.2.9.(4) includes the provision of 'written evidence' and would therefore constitute an equivalency. Equivalencies are covered under Part 2.

C. A. C. Comments :
The Committee agrees the original proposal should be rejected.

124

Code Reference 3.3.4.4.(2).

Proposal or Chall./Amend. Ref. No. 60

C. A. C. Recommendation ***Accept as amended***

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee accepts this proposal amended as follows:
"Subsection " should be " Sentence"

125

Code Reference 3.3.4.9.

Proposal or Chall./Amend. Ref. No. 35

C. A. C. Recommendation ***Accept***

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
A majority of the Committee considers this is a reasonable provision.

126

Code Reference 3.3.5.10

Proposal or Chall./Amend. Ref. No. 2

C. A. C. Recommendation ***Accept as amended***

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
A majority of the Committee considers this proposal is acceptable provided it is amended as follows:
Add the word " self " before storage (two locations).

126.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 2.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Disapprove proposal :

Reason:

Most multi-tenanted storage warehouses are unheated, uninsulated, and for the most part, unattended, therefore sprinklers would be subject to freezing and vandalism which could result in constant headaches and poor expected reliability of the sprinkler system. Also, such storage spaces are often filled to capacity, which can effect the sprinkler spray pattern and reduce its effectiveness, and tenants take little care when moving their belongings in and out of these spaces which can cause damage to sprinkler heads. If frequent problems arise, the system will be shut off.

As these buildings are typically unoccupied, there is little risk to life involved. Compartmentation is a viable and possibly better alternative to this property protection problem. Many of these type of buildings do provide fire separations between tenant spaces and those that do should not be penalized by also having to provide sprinklers. Therefore, if there is seen to be a need for additional protection in these buildings, the proposed change could be amended to read as follows:

3.3.5.10. Multi-Tenanted Warehouses. Where a Group F major occupancy is used as a multi-tenanted warehouse, each individual tenant space shall be separated from the remainder of the building by a fire separation having a 1 hr. fire resistance rating.

C. A. C. Comments :

The Committee have accepted an amended version of the proposal.

126.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 2.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Disapprove proposal :

Reason:

Although sprinklers are an effective method of protection, they are not the only means of providing a level of safety consistent with the intent of the Code. In some cases, compartmentation provides a better level of safety than sprinklers, and it is therefore unreasonable to make sprinklers a "mandatory" form of protection.

C. A. C. Comments :

The Committee have accepted an amended version of the proposal.

126.3 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 2.03

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Disapprove proposal :

Reason:

Adoption of these proposals would mandate sprinklers in buildings not presently required to be sprinklered. Suggest these proposals be withdrawn for the following reasons

The Associate Committee of the National Building Code of Canada has established a Task Group to report upon sprinkler requirement throughout Part 3 of the NBC. The Task Group anticipates that its report will be available by the Fall of 1992. I suggest that the proposed amendments be withheld pending the findings of the Task Group. In the meantime, it is suggested that the proponents of these changes submit the proposals to IRC for review by the Task Group. Arrangements may be made to give formal presentations to the Task Group by contacting IRC directly.

C. A. C. Comments :

The Committee have accepted an amended version of the proposal.

126.4 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 2.04

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept as amended***

Delete the proposed change or add a new definition for "multi-tenanted storage warehouse" and allow an option of providing fire separations in lieu of sprinklering.

Reason:

As presently drafted, this new article will apply to many Group F occupancies which are used for storage but which do not fall into the same class of the "multi-tenanted storage warehouse". If the building were accessible to fire service there may not be a need to sprinkler the buildings. A change to the Fire Code may offset this perceived hazard. Another consideration may be to require tenant separations and corridors to be protected by rated fire separations.

C. A. C. Comments :

The Committee accept this proposal amended as follows :

Add at the end of the Article :

"................or each unit shall be separated from the remainder of the *building* by a *fire separation* with a *fire-resistance rating* of not less than 45 min. "

---

127 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 188

Proposal : 3.3.5.10. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee rejected this proposal after giving careful consideration to the ramifications of adding such a system directly into the code. The Committee considers this type of system should not be part of the basic code requirements but should continue to be considered under the code equivalency provisions by the authority having jurisdiction .

127.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 188.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

This appears to be a proprietary product that, if part of the structure of the building and/or supports human activities of any kind, it should be considered as a mezzanine and, therefore, all appropriate requirements of the Code, including noncombustibility and fire-resistance, should apply. If this product is simply a storage rack and does not support any human activities, it is "furniture" and should not be regulated by the Code, although the appropriate sprinkler requirements would apply.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

127.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 188.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

This proposal appears to relate to a proprietary storage system which is one of at least three types that are available. Currently, all three systems would have to be dealt with under Article 2.5 on an equivalency basis. These systems are sufficiently different that adoption of this and related proposals could put the other systems at a significant marketing disadvantage. It would be better to incorporate an automatic detection, suppression and exiting requirements that would be applicable to all three systems rather than write the specific features of one system into the Code.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

---

128 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 335

Proposal : 3.3.8.10. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers that since Part 9 requires windows to conform with CSA A-440 that this is the minimum standard for windows required for residential buildings in Part 3. This standard already covers this proposal. See also Article 5.6.1.1. and definition of exterior cladding which applies to all Part 3 buildings.

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129 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 296

Proposal : 3.4.1. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers this could cause major design problems at the principal entrance, which in many cases is a feature of the building . To design this entrance as an exit would impose severe limitations on its design and finish which cannot be justified by past experience.

---

130 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 189

Proposal : 3.4.2.3. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee rejected this proposal after giving careful consideration to the ramifications of adding such a system directly into the code. The Committee considers this type of system should not be part of the basic code requirements but should continue to be considered under the code equivalency provisions by the authority having jurisdiction .

130.1
Code Reference See above
Proposal or Chall./Amend. Ref. No. 189.01
Challenge/ Amendment :
C. A. C. Recommendation *Accept*
Disapprove proposal :

Reason:
This appears to be a proprietary product that, if part of the structure of the building and/or supports human activities of any kind, it should be considered as a mezzanine and, therefore, all appropriate requirements of the Code, including noncombustibility and fire-resistance, should apply. If this product is simply a storage rack and does not support any human activities, it is "furniture" and should not be regulated by the Code, although the appropriate sprinkler requirements would apply.

C. A. C. Comments :
The Committee agrees the original proposal should be rejected.

130.2
Code Reference See above
Proposal or Chall./Amend. Ref. No. 189.02
Challenge/ Amendment :
C. A. C. Recommendation *Accept*
Disapprove proposal :

Reason:
This proposal appears to relate to a proprietary storage system which is one of at least three types that are available. Currently, all three systems would have to be dealt with under Article 2.5 on an equivalency basis. These systems are sufficiently different that adoption of this and related proposals could put the other systems at a significant marketing disadvantage. It would be better to incorporate an automatic detection, suppression and exiting requirements that would be applicable to all three systems rather than write the specific features of one system into the Code.

C. A. C. Comments :
The Committee agrees the original proposal should be rejected.

131
Code Reference 3.4.3.1.(2)
Proposal or Chall./Amend. Ref. No. 348
Proposal :
C. A. C. Recommendation *Accept as amended*
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee accepts this proposal **amended** as follows :
Cross reference to " 3.7.3.8.(3)(a) " should now be " 3.3.1.12.(3)(a) ".

132
Code Reference 3.4.3.1.(2)(e)
Proposal or Chall./Amend. Ref. No. 133
Proposal :
C. A. C. Recommendation *Reject*
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee prefers the approach taken in the previous proposal.

133
Code Reference 3.4.3.5.
Proposal or Chall./Amend. Ref. No. 251
Proposal :
C. A. C. Recommendation *Reject*
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee prefers the current method of presentation.

134
Code Reference 3.4.3.7.(2).
Proposal or Chall./Amend. Ref. No. 64
Proposal :
C. A. C. Recommendation *Accept*
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee agrees with the use of uniform clearances where possible throughout the code.

135
Code Reference 3.4.4.2.(2)
Proposal or Chall./Amend. Ref. No. 228
Proposal :
C. A. C. Recommendation *Reject*
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee do not agree with the proponants interpretation of the current code requirements . Exits are from floor areas not necessarily tenancies. Access to exits lead from suites to exits which are usually shared. The proposal could result in several exits from the same floor area exiting through a lobby when the intent is clearly to permit only one exit from each floor area through the lobby.

135.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 228.01

Challenge/ Amendment : See above **C. A. C. Recommendation** *Accept*

Disapprove proposal :

Reason:

This proposal confuses the requirements for "access to exit" with requirements for exits. The existing Code requirements already permit all tenant areas on the lobby floor level to egress through the lobby, regardless of the number of egress doorways required from each suite, and this proposed change should therefore be rejected.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

---

136 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 208

Proposal : 3.4.4.2.(2)(b) **C. A. C. Recommendation** *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers the total path of travel through the lobby should be limited to 15m . This proposal could result in much longer paths of travel since the 15m would only be measured from the bottom of the stairs and the portion before this point could be any length.

136.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 208.01

Challenge/ Amendment : See above **C. A. C. Recommendation** *Accept*

Challenge proposal :

Reason:

This proposed change fails to recognize that a separation is required between the discharging stair and the lobby. The 15 m travel distance limitation is not measured from the bottom of the discharging stair, rather, it is measured from the stair discharge door into the lobby.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

---

137 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 197

Proposal : 3.4.4.4.(1) **C. A. C. Recommendation** *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee do not consider this change is required.

137.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 197.01

Challenge/ Amendment : See above **C. A. C. Recommendation** *Accept*

Challenge proposal :

Reason:

The reason for this proposed change appears to be referring to contiguous stairs which is dealt with under Sentence 3.4.4.4.(3), which disallows pipe penetrations of contiguous stairs.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

---

138 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 293

Proposal : 3.4.5.1. **C. A. C. Recommendation** *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers this proposal would require further research into it's feasibilty before it could be endorsed.

138.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 293.01

Challenge/ Amendment : See above **C. A. C. Recommendation** *Accept*

Disapprove proposal :
Do not add Sentence.

Reason:

The whole area of exit signage seems to be in a state of flux now and can be expected to change as various agencies complete research on location colour and other features of such signs. To impose this additional costly requirement now seem premature.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

138.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 293.02

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Challenge proposal :

Reason:
Inadequate technical justification is provided for this proposed change. No adverse fire history exists to support this change.

C. A. C. Comments :
The Committee agrees the original proposal should be rejected.

139

Code Reference 3.4.5.1.(1)

Proposal or Chall./Amend. Ref. No. 297

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee considers the current code requirement sufficiently restrictive to maintain safety levels.

140

Code Reference 3.4.5.1.(2)

Proposal or Chall./Amend. Ref. No. 300

Proposal :

C. A. C. Recommendation *Accept*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee agrees this proposal makes sense for B.C.

141

Code Reference 3.4.5.1.(3)(b)

Proposal or Chall./Amend. Ref. No. 180

Proposal :

C. A. C. Recommendation *Accept*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee agrees provision should be made for the newer sign materials.

142

Code Reference 3.4.5.1.(5).

Proposal or Chall./Amend. Ref. No. 299

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee considers the wording "where necessary " could lead to interpretation problems. Current signage requirements appear to be working.

143

Code Reference 3.4.6.1.(1)

Proposal or Chall./Amend. Ref. No. 252

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee prefers the existing wording which includes stair treads. They consider the long term adhesion problem of adhered slip resistant strips to be a question of maintenance and beyond the scope of the building code.

144

Code Reference 3.4.6.4.(2)

Proposal or Chall./Amend. Ref. No. 253

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee considers that this proposal is not practical and would cause future problems.

145

Code Reference 3.4.6.4.(3)

Proposal or Chall./Amend. Ref. No. 254

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee prefers the current requirement over this proposal, which it considers will cause problems in interpretion.

146

Code Reference 3.4.6.4.(4)

Proposal or Chall./Amend. Ref. No. 255

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee considers the1070 mm height too high even for a graspable handrail.

147

Code Reference 3.4.6.4.(5)

Proposal or Chall./Amend. Ref. No. 256

C. A. C. Recommendation *Accept as amended*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts the following amended wording:-
Add at the start of the Sentence as follows:
"Except for stairs serving only one *dwelling unit*"

148

Code Reference 3.4.6.4.(5).

Proposal or Chall./Amend. Ref. No. 343

C. A. C. Recommendation *Reject*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee prefers proposal No. 256, as amended.

149

Code Reference 3.4.6.4.(9)

Proposal or Chall./Amend. Ref. No. 257

C. A. C. Recommendation *Reject*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers this is already covered by the proposed integration of the 1985 B.C.B.C Clause 3.7.3.15.(1)(f) requirement into Subsection 3.3.1. of the new code.

150

Code Reference 3.4.6.7.

Proposal or Chall./Amend. Ref. No. 4

C. A. C. Recommendation *Reject*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers this proposal would be too difficult to enforce.

151

Code Reference 3.4.6.7.

Proposal or Chall./Amend. Ref. No. 135

C. A. C. Recommendation *Reject*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers the phrase " stairs which can only be used in a descending direction" will result in too many interpretation disputes.

152

Code Reference 3.4.6.15.(1)(a)

Proposal or Chall./Amend. Ref. No. 117

C. A. C. Recommendation *Accept as amended*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal amended as follows :
Delete the following wording from the proposal : " that this requirement may be waived "

153

Code Reference 3.4.6.15.(2).

Proposal or Chall./Amend. Ref. No. 338

C. A. C. Recommendation *Accept as amended*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal with the proposed reference amended to: " 3.3.1.12.(3)(e) "

154

Code Reference 3.4.6.15.(4).

Proposal or Chall./Amend. Ref. No. 345

C. A. C. Recommendation *Accept*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees the referencing of the Canadian standard is a improvement.

154.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 345.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Amend the proposal as follows:
Delete proposal and substitute as follows :

(4.) Electromagnetic locks complying with CAN/ULC-S533 "Standard for Egress Door Securing & Releasing Devices" that do not incorporate latches, pins or other similar devices to keep the door in a closed position are permitted to be installed on exit doors in a means of egress provided:

(a) as per 1990 NBC.
(b) as per 1990 NBC.
(c) as per 1990 NBC.
(d) as per 1990 NBC.
(e) as per 1990 NBC.

Add new Clause :

(f) The exit doors do not serve or lead directly from A Group F, Division 1 occupancy.

Add new Sentence :

(5.) In a group B, Division 2 occupancy, Sentence (4)(c) and (e) need not apply where patient safety may be compromised by uncontrolled egress.

Reason:

1. Editorial.
2. Sentence (4) does not address the special requirements and definite needs in Health Care Facilities to control/stops children, psychiatric and confused elderly patients from wandering. The 15s requirement in Subclauses (c) and (e) negates the usefullness of installing these systems while complying with Subclause (a), (b) and (d) ensures safety in emergency situations.

This is also in keeping with the reasoning in Appendix A.

C. A. C. Comments :

The Committee do not agree with the rejection of this proposal.

---

155 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 267

Proposal : 3.5.1.2. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers these requirements should remain in the Building Code which is the prime control document for safety in construction.

---

156 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 268

Proposal : 3.5.2.9.(1) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers these requirements should remain as they are currently stated in the Building Code.

---

157 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 270

Proposal : 3.5.4.3.(1) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers these requirements should remain in the Building Code which is the prime control document for safety in construction.

---

158 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 7

Proposal : 3.5.5.3. **C. A. C. Recommendation** ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal amended as follows :

Add the following at end of the Article: " (See Appendix Sentence 3.1.8.5. (4)) "

---

159 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 226

Proposal : 3.6.4.2. **C. A. C. Recommendation** ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts that all A-2 occupancies should have the same washroom requirements.

---

160 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 353

Proposal : 3.6.4.2. **C. A. C. Recommendation** ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee acknowledges this is a step towards resolving a long-standing problem.

161

Code Reference 3.6.4.2.

Proposal or Chall./Amend. Ref. No. 201

C. A. C. Recommendation *Reject*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee considers the current wording satisfactory.

162

Code Reference 3.6.4.2.

Proposal or Chall./Amend. Ref. No. 326

C. A. C. Recommendation *Reject*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee prefers the approach taken in proposal No 160.

163

Code Reference 3.6.4.2.

Proposal or Chall./Amend. Ref. No. 279

C. A. C. Recommendation *Reject*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee considers the current wording is adequate.

164

Code Reference 3.6.4.2.(9)

Proposal or Chall./Amend. Ref. No. 212

C. A. C. Recommendation *Accept*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee accepts this additional wording. It should reduce the problems being encountered by enforcement authorities in obtaining use of facilities by the public

165

Code Reference 3.6.4.2.(10).

Proposal or Chall./Amend. Ref. No. 15

C. A. C. Recommendation *Reject*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee considers the code already has provisions to cover this situation and this proposal could increase enforcement problems.

165.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 15.01

C. A. C. Recommendation *Accept*

Challenge/ Amendment :
Disapprove proposal :

Reason:
A potential problem occurs if the building changes in ownership or tenancy, creating an occupant load which may not exceed that derived from Table 3.1.14.A., but which is much more than a previous occupant load upon which the number of washrooms had been based. This would result in an insufficient number of washrooms.

C. A. C. Comments :
The Committee agrees the proposal should be rejected.

166

Code Reference 3.6.4.2.(11)

Proposal or Chall./Amend. Ref. No. 216

C. A. C. Recommendation *Accept*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee considers the extension of this provision into these occupancies makes sense.

167

Code Reference 3.7.1.2.

Proposal or Chall./Amend. Ref. No. 136

C. A. C. Recommendation *Accept*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee agrees that the introduction of firewalls should not be a means of avoiding compliance with the disabled requirements.

167.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 136.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Amend the proposal as follows:
Add after the word " firewall " in the first line the phrase " or an exterior wall, "

Reason:

The wording should reference openings which would require the "buildings" to comply to the requirement, such as "horizontal exits" or access doors and not list some openings which would not require compliance and not include others, such as conveyors and other manufacturing process.

C. A. C. Comments :

The Committee have accepted the original proposal but do not accept this amendment.

168 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 132

Proposal : 3.7.1.3.(2) **C. A. C. Recommendation** ***Reject***

** See , Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees with the intent but considers the proposed additional wording would cause future enforcement and interpretation problems.

168.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 132.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Challenge proposal :

Reason:

The phrase "as equal as practicable" open to too much interpretation. Meaning should be narrowed down or elaborated.

C. A. C. Comments :

The Committee agrees with this challenge.

169 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 143

Proposal : 3.7.1.3. **C. A. C. Recommendation** ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal amended as follows :

Delete proposed Clause 3.7.2.5.(1)(e) and substitute as follows:

(e) each *floor area* which is required to be *accessible* shall be provided with *areas of refuge* in conformance with Article 3.7.3.27. (See Appendix A)

169.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 143.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Challenge proposal :

Reason:

Definition for area of refuge overlaps with Sentence 3.7.3.27.(2) and would therefore seem redundant and creates more misinterpretation. Would be more appropriate to amend or clarify Sentence 3.7.3.27.(2) rather than create a new definition for area of refuge. Since the phrase "Area of Refuge" occurs not too frequently in the code, does not seem to be a need to define area of refuge, it is sufficiently defined by Sentence 3.7.3.27.(2).

Defining firefighter's elevator redundant. Reference is made in the code to 3.2.6.

Defining smoke protected redundant. Reference is made to 3.2.6.

C. A. C. Comments :

The Committee has accepted the original proposal as amended.

169.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 143.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Disapprove proposal :

Reason:

If these changes are allowed they would impose severe economic penalties on owners or developers of small buildings. The existing conditions are severe enough.

C. A. C. Comments :

The Committee has accepted the original proposal as amended.

170

Code Reference 3.7.2.1.

Proposal or Chall./Amend. Ref. No. 131

C. A. C. Recommendation ***Reject***

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers the exemption should continue.

170.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 131.01

C. A. C. Recommendation ***Accept***

Challenge/ Amendment :

Challenge proposal :

Reason:

Convents and monasteries are exempt from 3.7 on the same basis as houses. These occupancies are not normally open to the public and are under the Church's Jurisdiction. Deleting the words "Convents" and "Monasteries" would impose hardship on these uses anytime that they wanted to carry out extensive renovation work. Consideration should also be given to the fact that thee uses are likely contained in heritage or very old buildings.

C. A. C. Comments :

The Committee agrees with this challenge.

171

Code Reference 3.7.2.

Proposal or Chall./Amend. Ref. No. 139

C. A. C. Recommendation ***Accept as amended***

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal **amended** as follows:

Delete the following wording in line 1 of Article 3.7.2.?: " classrooms" also " meeting rooms "

171.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 139.01

C. A. C. Recommendation ***Reject***

Challenge/ Amendment :

Amend the proposal as follows:

Delete Article 3.7.2.? and substitute :

All assembly occupancies with audio amplifcation systems shall have a permanent assistive listening system (ALS), to assist a reasonable number of persons, but no fewer than two, with severe hearing loss.

Delete Article 3.7.3.28. and substitute :

If the assistive listening system provided serves individual fixed seats, then such seats shall be located within 15 m viewing distance of the stage or playing area and shall have a complete view of the stage or playing area.

Delete Appendix Article A-3.7.3. 28. and substitute :

Hearing Loss and Hearing Impairment

There are many causative agents which can result in a permanent loss of hearing sensitivity, including prolonged exposure to high noise levels, disease, and trauma. There is also a general loss of hearing sensitivity with increasing age, called presbycusis loss...(cont.) (see document 2 pages plus letter)

Reason:

(1) The statement that 50% of the population has some degree of hearing impairment is true only in the most pedantic statistical sense. Significant hearing impairment affects roughly 10% of the population, although this percentage is indeed expected to increase.

(2) Attention should be given to acceptable conditions for normal listeners before mandatory installation of assistive listening devices for the hearing impaired is even considered. The amended wording proposes permanent assistive listening devices only in those situations where permanent audio amplification is required for normal listeners. (The 1990 NBC wording implies - but does not insist - that assistive listening systems are part of an installed audio amplification system). Portable systems (which do not fall under Building Codes) are suggested for all other situations, some of which may be worthy of permanent systems.

(3) The amended wording postulates at least a minimum sevice to persons with severe hearing loss. Since many persons with hearing impairments, for various reasons, avoid the selection and use of hearing aids entirely, the recommended policy is to allow a listening assistive receiver for each person electing to use a hearing aid. However, there are no accepted design guidelines or performance standards for assistive listening systems, or for that matter, audio amplification systems.

(4) The amended wording recognizes the importance of adequate visual cues for persons with hearing impairments.

C. A. C. Comments :

The Committee has accepted an amended version of the original proposal.

172

Code Reference 3.7.2.1.(2)(a).

Proposal or Chall./Amend. Ref. No. 137

C. A. C. Recommendation ***Accept as amended***

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal **amended** as follows:

In Clause 3.7.2.1.(2)(a) **delete** " 300 m_2 " and **substitute** " 600 m_2 "
also **delete** "and/ "

Delete Subclause (i) and renumber Subclauses (ii) and (iii) as (i) and (ii).

172.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 137.01

C. A. C. Recommendation *Reject*

Challenge/ Amendment :

Amend the proposal as follows:
Add after the words "*first storey*" the phrase "or second *storey*".

Reason:

The intent is to allow an extra storey to be inaccessible in compensation for reducing the floor area.

C. A. C. Comments :

The Committee do not agree with this amendment .

172.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 137.02

C. A. C. Recommendation *Reject*

Challenge/ Amendment :

Amend the proposal as follows:
Alter "300 m2 " in Clause (a) to " 600 m2 ", and
Delete Subclause (iii)

Reason:

a) Retain the original 600 m2 limitation, as it can be generally related to buildings in Part 9 or 3.
A building of 300 m2 is small. Where did this figure come from?
iii) This a fairly small restaurant,
- as the notes in the Appendix suggest, this would be quite a hardship.
- difficult to determine at building permit stage if a restaurant will be occupying a 2nd floor area, so they usually go in after the building is completed, and to require access at this late stage would be very costly.
- if half of the 100m2 is used for kitchen, washrooms, storage etc. the actual seating area is very small.

C. A. C. Comments :

The Committee do not agree with this amendment.

172.3

Code Reference See above

Proposal or Chall./Amend. Ref. No. 137.03

C. A. C. Recommendation *Reject*

Challenge/ Amendment :

Disapprove proposal :

Reason:

If these changes are allowed they would impose severe economic penalties on owners or developers of small buildings. The existing conditions are severe enough.

C. A. C. Comments :

The Committee do not agree with this challenge and have accepted an amended version of the proposal .

173

Code Reference 3.7.2.1.(2).

Proposal or Chall./Amend. Ref. No. 205

C. A. C. Recommendation *Reject*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee prefers the current wording.

174

Code Reference 3.7.2.1.(2)

Proposal or Chall./Amend. Ref. No. 130

C. A. C. Recommendation *Reject*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee prefers the current wording.

175

Code Reference 3.7.2.1.(2).

Proposal or Chall./Amend. Ref. No. 206

C. A. C. Recommendation *Reject*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee prefers the current wording.

176

Code Reference 3.7.2.2.

Proposal or Chall./Amend. Ref. No. 209

C. A. C. Recommendation *Reject*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee prefers the current wording.

177

Code Reference 3.7.2.5.(1)(d)

Proposal or Chall./Amend. Ref. No. 138

C. A. C. Recommendation *Accept as amended*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
B.T. to resubmit.

178

Code Reference 3.7.2.15.

Proposal or Chall./Amend. Ref. No. 129

C. A. C. Recommendation *Accept*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee agrees with this proposal.

179

Code Reference 3.7.2.18.(3)

Proposal or Chall./Amend. Ref. No. 128

C. A. C. Recommendation *Accept as amended*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee accepts this proposal **amended** as follows:
Delete the words " to which *disabled persons* are provides " and
substitute as follows: " which is required to be *accessible* "

180

Code Reference 3.7.2.41.(2)

Proposal or Chall./Amend. Ref. No. 127

C. A. C. Recommendation *Accept*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee agrees with this proposal.

181

Code Reference 3.7.3.2.(1)

Proposal or Chall./Amend. Ref. No. 126

C. A. C. Recommendation *Accept as amended*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee accepts this proposal **amended** as follows:
Add at the start of the Clause the word " not "

182

Code Reference 3.7.3.4.(1)

Proposal or Chall./Amend. Ref. No. 91

C. A. C. Recommendation *Reject*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee could not accept this proposal as there are too many available combinations of van lifts to regulate appropriate parking space.

182.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 91.01

C. A. C. Recommendation *Accept*

Challenge/ Amendment :
Disapprove proposal :

Reason:
Presently parking spaces for the disabled are sufficiently wide. Space can also be "borrowed" from adjacent spaces when a van has to operate a side-lift.

C. A. C. Comments :
The Committee accepts this challenge.

183

Code Reference 3.7.3.5.(4)

Proposal or Chall./Amend. Ref. No. 140

C. A. C. Recommendation *Reject*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee consider this more of a convenience feature than a code requirement.

184

Code Reference 3.7.3.8.(1).

Proposal or Chall./Amend. Ref. No. 125

C. A. C. Recommendation *Accept*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee accepts this proposal.

185 **Code Reference** 3.7.3.11. **Proposal or Chall./Amend. Ref. No.** 124

Proposal : **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee do not consider this should be a code requirement.

186 **Code Reference** 3.7.3.16. **Proposal or Chall./Amend. Ref. No.** 123

Proposal : **C. A. C. Recommendation** ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal **amended** as follows:
In Clause (b) **delete** the word " permanent " and **substitute** the word " durable "

187 **Code Reference** 3.7.3.18. **Proposal or Chall./Amend. Ref. No.** 141

Proposal : **C. A. C. Recommendation** ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal **amended** as follows:
Sentence 3.7.3.18.(1) should remain unaltered
Add new Clause 3.7.3.18.(2)(h) as follows: (h) *accessible* checkout lanes
Add Clause 3.7.3.18.(4)(d) as proposed

188 **Code Reference** 3.7.3.21.(6) **Proposal or Chall./Amend. Ref. No.** 224

Proposal : **C. A. C. Recommendation** ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal.

188.1 **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 224.01

Challenge/ Amendment : **C. A. C. Recommendation** ***Reject***

Amend the proposal as follows :
Delete the phrase " in place of required water closets as described in Sentence 3.6.4.2.(2), "

Reason:

The intent of this Sentence is to provide a lower urinal in any accessible washroom where urinals are provided. Whether or not the urinals are part of the required number of water closets or are in addition to the minimum number is not relevant. At least one of the urinals should be lower to be accessible to persons with disabilities.

C. A. C. Comments :

The Committee do not agree with this amendment.

189 **Code Reference** 3.7.3.21. **Proposal or Chall./Amend. Ref. No.** 142

Proposal : **C. A. C. Recommendation** ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal **amended** as follows:
In Clauses 3.7.3.21.(3) (a) and 3.7.3.21.(9)(a) **delete** the size " 1045 mm + - 25 mm " and **substitute** " 1020 mm "

190 **Code Reference** 3.7.3.23.. **Proposal or Chall./Amend. Ref. No.** 122

Proposal : **C. A. C. Recommendation** ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal.

191 **Code Reference** 3.7.3.24. **Proposal or Chall./Amend. Ref. No.** 121

Proposal : **C. A. C. Recommendation** ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal **amended** as follows:
Add Appendix note as follows:

A-3.7.3.24.(1)(d) Telephone Shelf. Many hearing impaired persons use a telecommunication device for the deaf (TDD) with a standard telephone to communicate visually. A shelf is needed to hold this device.

192

Code Reference 3.7.3.27.

Proposal or Chall./Amend. Ref. No. 312

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation ***Reject***

C. A. C. Comments :

The Committee could not accept this proposal since it could result in an excessive number of zones being required on the annunciator panel for this function .

193

Code Reference Section 3.8

Proposal or Chall./Amend. Ref. No. 202

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation ***Reject***

C. A. C. Comments :

After considerable debate the Comittee concluded that a specific section was not required in the code to deal with portable classrooms and that they should continue to be regulated by normal A 2 code requirements.

194

Code Reference 4.1.9.1.(10).

Proposal or Chall./Amend. Ref. No. 336

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation ***Reject***

C. A. C. Comments :

The Committee did not accept this proposal as it could result in a substantial increase in building cost for these centres, many of which are funded by non -profit organizations.

195

Code Reference 4.1.10.7.

Proposal or Chall./Amend. Ref. No. 190

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation ***Reject***

C. A. C. Comments :

The Committee rejected this proposal after giving careful consideration to the ramifications of adding such a system directly into the code. The Committee considers this type of system should not be part of the basic code requirements but should continue to be considered under the code equivalency provisions by the authority having jurisdiction .

195.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 190.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

This appears to be a proprietary product that, if part of the structure of the building and/or supports human activities of any kind, it should be considered as a mezzanine and, therefore, all appropriate requirements of the Code, including noncombustibility and fire-resistance, should apply. If this product is simply a storage rack and does not support any human activities, it is "furniture" and should not be regulated by the Code, although the appropriate sprinkler requirements would apply.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

195.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 190.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

This proposal appears to relate to a proprietary storage system which is one of at least three types that are available. Currently, all three systems would have to be dealt with under Article 2.5 on an equivalency basis. These systems are sufficiently different that adoption of this and related proposals could put the other systems at a significant marketing disadvantage. It would be better to incorporate an automatic detection, suppression and exiting requirements that would be applicable to all three systems rather than write the specific features of one system into the Code.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

196

Code Reference 4.2.2.1.

Proposal or Chall./Amend. Ref. No. 285

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation ***Reject***

C. A. C. Comments :

The Committee is of the opinion both Articles are required.

196.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 285.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :
Leave Section 4.2.2.1. and Section 4.2.4.2. as written in NBC '90.

Reason:

Section 4.2.2.1. specifies a subsurface investigation shall be carried out which will include ground water conditions. See definition of subsurface investigation. Section 4.2.4.2, although similar to Section 4.2.2.1., its scope is limited to the design requirements relating to the design of foundations, excavations, and soild and rock retaining structures.

Both are required and should remain.

C. A. C. Comments :

The Committee agrees with this challenge.

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197 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 93

Proposal : 4.3.3.2. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee is of the opinion that this is adequately covered by the reference standard.

197.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 93.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

The Canadian Welding Bureau has asked to have data that pertains to welding standards that are referenced in the steel and aluminum standards referenced in Section 4.3.4. and 4.3.5. of the Code to be spelled out in detail in the 1990 B.C. Building Code.

It is our contention that designers and manufacturers who are using this part of the Code should be aware that all structural welding should be done to an appropriate standard and by a qualified welder. By doing this for one trade, do we have to list all pertinent standards to cover all other trades as well.

C. A. C. Comments :

The Committee agrees with this challenge.

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198 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 94

Proposal : 4.3.3.3. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee is of the opinion that this is adequately covered by the reference standard.

198.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 94.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

The Canadian Welding Bureau has asked to have data that pertains to welding standards that are referenced in the steel and aluminum standards referenced in Section 4.3.4. and 4.3.5. of the Code to be spelled out in detail in the 1990 B.C. Building Code.

It is our contention that designers and manufacturers who are using this part of the Code should be aware that all structural welding should be done to an appropriate standard and by a qualified welder. By doing this for one trade, do we have to list all pertinent standards to cover all other trades as well.

C. A. C. Comments :

The Committee agrees with this challenge.

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199 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 95

Proposal : 4.3.4.1. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee is of the opinion that this is adequately covered by the reference standard.

199.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 95.01

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

The Canadian Welding Bureau has asked to have data that pertains to welding standards that are referenced in the steel and aluminum standards referenced in Section 4.3.4. and 4.3.5. of the Code to be spelled out in detail in the 1990 B.C. Building Code.

It is our contention that designers and manufacturers who are using this part of the Code should be aware that all structural welding should be done to an appropriate standard and by a qualified welder. By doing this for one trade, do we have to list all pertinent standards to cover all other trades as well.

C. A. C. Comments :

The Committee agrees with this challenge.

200

Code Reference 4.3.4.2.

Proposal or Chall./Amend. Ref. No. 96

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee is of the opinion that this is adequately covered by the reference standard.

200.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 96.01

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

The Canadian Welding Bureau has asked to have data that pertains to welding standards that are referenced in the steel and aluminum standards referenced in Section 4.3.4. and 4.3.5. of the Code to be spelled out in detail in the 1990 B.C. Building Code.

It is our contention that designers and manufacturers who are using this part of the Code should be aware that all structural welding should be done to an appropriate standard and by a qualified welder. By doing this for one trade, do we have to list all pertinent standards to cover all other trades as well.

C. A. C. Comments :

The Committee agrees with this challenge.

201

Code Reference 4.3.5.2.

Proposal or Chall./Amend. Ref. No. 97

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee is of the opinion that this is adequately covered by the reference standard.

201.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 97.01

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

The Canadian Welding Bureau has asked to have data that pertains to welding standards that are referenced in the steel and aluminum standards referenced in Section 4.3.4. and 4.3.5. of the Code to be spelled out in detail in the 1990 B.C. Building Code.

It is our contention that designers and manufacturers who are using this part of the Code should be aware that all structural welding should be done to an appropriate standard and by a qualified welder. By doing this for one trade, do we have to list all pertinent standards to cover all other trades as well.

C. A. C. Comments :

The Committee agrees with this challenge

202

Code Reference 6.2.

Proposal or Chall./Amend. Ref. No. 149

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not accept this proposal in view of the comprehensive studies being carried out by IRC into new national energy standards.

202.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 149.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows:

6.2.1.?. Energy Management. All *buildings* classified as Group C - Residential Buildings or whose use would define them as a "factory, office or shop", in Section 1 of the Workplace Act shall be designed and constructed to provide a maximum area weighted average thermal transmittance as follows:

Exterior Walls - Uo = 0.140
Exterior Ceiling - Uo = 0.064
Slabs on Grade - Uo = 0.200
Exterior floors - Uo = 0.056

Reason:

This amendment is in response to editorial comment on our original submission, in regards to code format wording.

In further support of our proposal, we enclose copies of the appropriate sections of the Work Place Act and the Occupational Environment Regulations thereof. These regulations require that all buildings that people work in be heated to either 65 or 70 degrees fahrenheit measured at 5 feet from the floor.

This being the case, it is incumbent upon building operators to provide the heat required to maintain these temperatures. If these buildings are not adequately insulated, then the higher cost of this energy is added to the operating costs of the business. (Cont. See 5 page support document)

C. A. C. Comments :

The Committee did not accept this amendment in view of the studies being carried out by IRC into new national energy conservation standards.

203

Code Reference 6.2.1.4.(1)

Proposal or Chall./Amend. Ref. No. 271

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers these requirements should remain in the Building Code which is the prime control document for safety in construction.

204

Code Reference 6.2.1.13.

Proposal or Chall./Amend. Ref. No. 232

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

Proposals 231 and 232 cover energy conservation in large new buildings and requires compliance with ASHRAE/ IES 90.1 -1989 an energy efficiency standard developed in the U.S.A. The Committee after careful consideration could not recommend the use of this standard as a reference document in its present form. New national energy conservation measures are currently being developed for the next code cycle which could be substantially different from this ASHRAE standard. As an interim measure, the Committee has amended an other proposal requiring minimum insulation levels in residential occupancies.

204.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 232.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the original proposal :

Delete the proposal and substitute as follows:

6.2.1.13. Energy Management

(1) Except as provided in Sentences (1) and (3) all buildings shall be designed, constructed and installed to conform to the energy conservation measures in ASHRAE/ IES 90.1-1989.

(2) Buildings classified as Group C major occupancies, not exceeding 3 storeys in building height and used as Apartments, Condominiums, Boarding Houses, Residential Clubs, Residential Colleges, Convents, Dormitories, Houses, Lodging Houses, Monasteries, and Residential Schools shall conform to the appropriate requirements for energy saving contained in Part 9.

(3) Alterations or additions to existing buildings are not required to conform to Sentence (1) provided that the existing building was permitted prior to the adoption of the 1990 B.C. Building Code.

Appendix

A- 6.2.1.13.(1) Energy Management. The appropriate requirements in Part 9 include all the energy saving related measures which would normally bre applied to a building of similar usage and construction, if it was constructed under Part 9 requirements

A- 6.2.1.13.(2) Energy Management This Sentence will be deemed to be satisfied by a letter of compliance certified and sealed by a professional engineer or architect licensed in the Province of British Columbia.

Reason:

Refinement of October 1, 1990 submission.

C. A. C. Comments :

Proposals 231 and 232 cover energy conservation in large new buildings and requires compliance with ASHRAE/ IES 90.1 -1989 an energy efficiency standard developed in the U.S.A. The Committee after careful consideration could not recommend the use of this standard as a reference document in its present form. New national energy conservation measures are currently being developed for the next code cycle which could be substantially different from this ASHRAE standard. As an interim measure, the Committee has amended an other proposal requiring minimum insulation levels in residential occupancies.

205 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 346

Proposal : 6.2.2.3.(2) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee could not approve this proposal since there is no acceptable standard for carbon monoxide monitoring devices.

205.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 346.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

Cannot reference a standard if no standard exists. We have not been able to locate a standard which covers the design and construction of carbon monoxide measuring devices.

Checked with Standards Council of Canada and there is no Canadian standard.

C. A. C. Comments :

The Committee agrees with this challenge.

---

206 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 70

Proposal : 6.2.4.2.(1) **C. A. C. Recommendation** ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal. The additional duct sizes are already used by industry.

---

207 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 304

Proposal : 7.1.2.1. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee prefers the current code wording.

---

208 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 282

Proposal : 8.2.1.3.(1). **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers the code already covers this situation by requiring a covered way when space is less than 2 m.

---

209 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 28

Proposal : 9.4.2.2.(1) **C. A. C. Recommendation** ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal as being required in B.C. due to varied local snow conditions.

209.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 28.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Amend the proposal as follows :

Do not delete but add the suggested change as an 'or'.

Also add that when the loads are determined in accordance with Subsection 2.2.1., they shall be submitted to the Building Standards Branch for comment, prior to the adoption of the new Code. These would be sent out with challenges to CAC recommendations in September.

Reason:

Reason so that those wishing to use Chapter 1 may do so. Builders and manufacturers need to know the requirements, therefore they need to be a part of the Code. This seems to be a major change to the code and the industry needs to know.

C. A. C. Comments :

The Committee rejects this amendment . Proposal # 28 maintains what is required by the current code and this has provided satisfactory performance.

---

210 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 152

Proposal : 9.5.7.1. **C. A. C. Recommendation** ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees with this proposal.

210.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 152.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Disapprove proposal :

Reason:

All dwelling units should have at least one enclosed space that is large enough to accommodate a bathtub; water closet and lavatory. One must be able to either install a shower and/or bathtub, but it should be sized to accommodate a tub. Suggest amending 9.31.4.1. to include "or shower".

C. A. C. Comments :

The Committee prefers the original proposal.

210.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 152.02

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Disapprove proposal :

Reason:

The proposed change is not definative enough in that the bathtub in a single family dwelling unit usually incorporates the shower. A change such as this without defining a bathtub or shower " cabinet " may encourage bathtubs of such small dimensions that they would not be practical.

The elimination of a bathtub in lieu of a shower cabinet would certainly save some space but surveys indicate that the prime occupants of single familly dwellings are families with small children and elderly couples both of which generally bathe rather than shower.

W e would therefore be opposed to such an inconsiderate code change.

C. A. C. Comments :

The Committee prefers the original proposal.

211

Code Reference 9.6.3.2.

Proposal or Chall./Amend. Ref. No. 342

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee prefers the current code wording.

211.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 342.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows:
Do not delete but add to Table 9.6.3.A.
Add " public water closet room " before "utility room" in the second box.

Reason:

Subsection 9.9.6. is for means of egress.

C. A. C. Comments :

The Committee prefers the current code wording.

212

Code Reference 9.6.3.3.

Proposal or Chall./Amend. Ref. No. 153

Proposal :

C. A. C. Recommendation ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees with the deletion of this Article.

212.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 153.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Disapprove proposal

Reason:

A minimum door width in a bathroom is necessary to allow the passage of a bathtub, if and when it is to be replaced or repaired.

C. A. C. Comments :

The Committee agrees with the deletion of this Article.

212.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 153.02

Challenge/ Amendment : See above **C. A. C. Recommendation** *Reject*

Amend the proposal as follows:
Add to Table 9.6.3.A.
In the sixth box add and 1 bathroom containing a bathtub or shower, water closet and lavatory.

Reason:

Should be in the Table, not a Sentence.

C. A. C. Comments :

The Committee agrees with the deletion of this Article.

212.3 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 153.03

Challenge/ Amendment : See above **C. A. C. Recommendation** *Reject*

Challenge proposal :

Reason:

Must be a typo.

C. A. C. Comments :

The Committee agrees with the deletion of this Article.

---

213 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 39

Proposal : 9.6.5.7. **C. A. C. Recommendation** *Accept as amended*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal amended as follows:
9.7.3.3. Glass in Windows. Glass in windows that extend to less than 200 mm from the floor shall be safety or wired glass.

---

214 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 37

Proposal : 9.6.6.3 **C. A. C. Recommendation** *Accept as amended*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal amended as follows:
Delete the phrase " keys or other similar devices" and substitute as follows: " keys, other similar devices or specialized knowledge "

---

215 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 145

Proposal : 9.6.6.5. **C. A. C. Recommendation** *Accept*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal.

---

216 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 146

Proposal : 9.6.6.8. **C. A. C. Recommendation** *Accept*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal.

---

217 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 32

Proposal : 9.7.1.3. **C. A. C. Recommendation** *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers the proposal unacceptably restrictive.

217.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 32.01

Challenge/ Amendment :

C. A. C. Recommendation *Reject*

Amend the proposal as follows :

Delete related proposals #29 & 36.

Amend proposal #32 as follows:

Article **9.7.1.3.**

(3) The openable section of the required window shall have a sill height no more than 1200 mm from the finished floor level with no glazing located under the openable section.

(4) Locking hardware shall not be located more than 1300 mm from finished floor level.

Reason:

(1) To allow for a greater range of window sizes and styles to be used and still keep the sill height acccessible to the average person in an emergency situation.

(2) To eliminate the minimum sill height limitation of proposal #36. It is not necessary to limit the minimum sill height.

C. A. C. Comments :

The Committee considers the proposal unacceptably restrictive.

217.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 32.02

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

Would eliminate all windows 1060 mm and under. Other ways of providing access.

C. A. C. Comments :

The Committee accepts this challenge.

218

Code Reference 9.7.1.3.

Proposal or Chall./Amend. Ref. No. 36

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers the proposal unacceptably restrictive.

218.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 36.01

Challenge/ Amendment :

C. A. C. Recommendation *Reject*

Amend the proposal as follows :

Delete related proposal #29.

Amend proposal as follows:

Article 9.7.1.3.

(3) The openable section of the required window shall have a sill height no more than 1200 mm from the finished floor level with no glazing located under the openable section.

Reason:

Eliminate the minimum height limitation. The intent is to limit sill height so small children can easily escape.

A lower sill height may reduce smoke inhalation risks.

C. A. C. Comments :

The Committee considers the proposal unacceptably restrictive.

218.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 36.02

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

Would eliminate most casement windows. Other ways of making the hardware accessible.

C. A. C. Comments :

The Committee accepts this challenge.

219

Code Reference 9.7.1.3.

Proposal or Chall./Amend. Ref. No. 29

Proposal :

C. A. C. Recommendation *Accept as amended*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accept this proposal amended as follows:

(3) The bottom of the opening referred to in Sentence (2) shall be at a height of not more than 1.5 m above the floor or shall be otherwise acceptable to the *authority having jurisdiction* as a means of escape in an emergency.

219.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 29.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Disapprove proposal :

Reason:

Would eliminate all windows 1060 mm and under. Other ways of providing access.

C. A. C. Comments :

The Committee has accepted an amended version of this proposal so the challenge is rejected.

---

220 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 233

Proposal : 9.7.1.5 **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

Proposals 233 and 234 cover energy conservation in small buildings . The Committee after careful consideration could not recommend acceptance in its present form. New National energy conservation measures are currently being developed for the next code cycle which could be substantially different from these proposals. As an interim measure, the Committee has amended an other proposal requiring minimum insulation levels in residential occupancies.

220.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 233.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

Should be a government regulation, not a code item.
Only health and safety should be in the Code.
Note frames of equal value to glazing would eliminate present wood frames as they have an R value which is less than double glazing. See CCP #296.

C. A. C. Comments :

The Committee agrees that proposal # 233 should be rejected. They have however, amended an other proposal to require minimum thermal insulation levels in all residential occupancies.

220.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 233.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Amend the original proposal :
Delete the proposal and substitute as follows:
9.7.1.5. Thermal Glazing
(1) In buildings intended for use on a continuous basis during the winter months, windows which separate heated space from unheated space or the exterior shall be provided with double or triple glazing or equivalents in accordance with Table 9.25.2.A. or Table 9.25.2.B.
(See Appendix A).
(2) Double glazed windows shall be provided with minimum 12 mm air space between panes. Triple glazed windows shall be provided with a minimum 9 mm air space.
(3) A storm sash may be substituted for one of the layers of glazing required.
9.7.1.6. Window & Skylight Areas. Where the total window and skylight area (based on rough opening size) exceeds 15% of the total habitable floor area of the building, extra thermal insulation measures shall be taken to compensate for the heat loss from this additional glazed area. (See Appendix A.)

Appendix

Add in Article A-9.7.1.5. as proposal # 233
Add at end of above as follows:
Window equivalency can be determined by:
1) Testing by a recognized testing lab.
2) Computer programs such as a Window 3.1, or Vision and Frame.
3) Table 13, Chapter 27 of the 1989 ASHRAE Handbook of Fundamentals.
Add in Article A-9.7.1.6. as proposal # 233 amended as follows :
In the third line after triple glazing add " , or double glazing with low-E glass, " where only...........

Reason:

-Refinement of October 1, 1990 submission.

C. A. C. Comments :

Proposals 233 and 234 cover energy conservation in small new buildings . The Committee after careful consideration could not recommend acceptance in its present form. New National energy conservation measures are currently being developed for the next code cycle which could be substantially different from these proposals. As an interim measure, the Committee has amended an other proposal requiring minimum insulation levels in all residential occupancies.

221

Code Reference 9.7.3.3.

Proposal or Chall./Amend. Ref. No. 52

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Recommendation *Accept*

C. A. C. Comments :
The Committee accepts this proposal.

222

Code Reference 9.7.6.

Proposal or Chall./Amend. Ref. No. 71

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Recommendation *Accept*

C. A. C. Comments :
The Committee agrees with the deletion of this Article.

223

Code Reference 9.7.7.3.

Proposal or Chall./Amend. Ref. No. 69

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Recommendation *Reject*

C. A. C. Comments :
The Committee could not accept this proposal as not only would the cost be excessive there are indications that laminated glass falling from a breakage of such a unit could be almost as dangerous as ordinary glass.

224

Code Reference 9.8.7.7.

Proposal or Chall./Amend. Ref. No. 108

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Recommendation *Reject*

C. A. C. Comments :
The Committee could not accept this proposal as the construction of many dwelling unit stair guards would be difficult without newal posts and the safety of the end result questionable.

224.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 108.01

Challenge/ Amendment :
Disapprove proposal :

C. A. C. Recommendation *Accept*

Reason:
Single family units have always used 2 x 4 on the flat for secondary stairs and 2 x 4 and larger have been used on edge many times in all types of construction.

C. A. C. Comments :
The Committee agrees with the rejection of this proposal.

225

Code Reference 9.8.8.1.

Proposal or Chall./Amend. Ref. No. 308

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Recommendation *Reject*

C. A. C. Comments :
The Committee could not accept this proposal, satisfactory performance should be a result of correct design, not just treatment with preservative.

225.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 308.01

Challenge/ Amendment :
Amend the proposal as follows:
Delete in Sentence (7) the word "boxing" and substitute "rim".

C. A. C. Recommendation *Reject*

Reason:
'boxing' joist is an unusual term and may lead to confusion. I have not heard of it before. I believe a more commonly used term is 'rim' joist. Both terms are not defined in the 1985 B.C.B.C.
PS. I like both amendments.

C. A. C. Comments :
The original proposal was rejected so the Committee could not accept this amendment .

225.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 308.02

Challenge/ Amendment :
Disapprove proposal :

C. A. C. Recommendation *Accept*

Reason:
If properly maintained it will not be a problem, at some time they will need to be replaced but so will the stairway.

C. A. C. Comments :
The Committee agrees with the rejection of this proposal.

226 **Code Reference** 9.8.8.2. **Proposal or Chall./Amend. Ref. No.** 105

Proposal : **C. A. C. Recommendation** *Accept*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee accepts this proposal.

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227 **Code Reference** 9.8.8.4 **Proposal or Chall./Amend. Ref. No.** 43

Proposal : **C. A. C. Recommendation** *Accept as amended*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee accepts this proposal amended as follows:
Add at the beginning of the Article: " Except for the openings between the stair treads and a line drawn through the outside edges of the stair nosings, "

---

228 **Code Reference** 9.8.8.5. **Proposal or Chall./Amend. Ref. No.** 106

Proposal : **C. A. C. Recommendation** *Accept*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee accepts this proposal.

---

229 **Code Reference** 9.9.6.4.(1). **Proposal or Chall./Amend. Ref. No.** 340

Proposal : **C. A. C. Recommendation** *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee prefers the code wording.

229.1 **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 340.01

Challenge/ Amendment : **C. A. C. Recommendation** *Accept*

Disapprove proposal :

Reason:
Doors from rooms within a suite do not have the same escape load as does the entry door.

C. A. C. Comments :
The Committee agrees with the rejection of this proposal.

---

230 **Code Reference** 9.9.6.5. **Proposal or Chall./Amend. Ref. No.** 328

Proposal : **C. A. C. Recommendation** *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee did not accept this proposal as the current wording has proven adequate.

---

231 **Code Reference** 9.9.6.8. **Proposal or Chall./Amend. Ref. No.** 339

Proposal : **C. A. C. Recommendation** *Accept*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee accepts this proposal.

---

232 **Code Reference** 9.9.9.1. **Proposal or Chall./Amend. Ref. No.** 17

Proposal : **C. A. C. Recommendation** *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee prefers the code wording.

---

233 **Code Reference** 9.9.9.1.(1). **Proposal or Chall./Amend. Ref. No.** 292

Proposal : **C. A. C. Recommendation** *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee prefers the code wording.

234

Code Reference 9.9.10.

Proposal or Chall./Amend. Ref. No. 298

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation *Reject*

C. A. C. Comments :

The Committee prefers the current wording for part 9 buildings.

235

Code Reference 9.10.1.

Proposal or Chall./Amend. Ref. No. 23

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation *Reject*

C. A. C. Comments :

The Committee rejects this *proposal for many reasons including cost , questionable reduction* of fire related fatalities and adverse national studies.

235.01

Code Reference See above

Proposal or Chall./Amend. Ref. No. 23.01

Challenge/ Amendment :

C. A. C. Recommendation *Reject*

Amend the proposed Article 9.10.1.? as follows:

All single family *dwelling units* shall be *sprinklered* in the following rooms: all bedrooms, kitchens, laundry rooms, storage rooms, and any room with a fuel burning *appliance*.

Reason:

"sprinklered" is not defined. Does it mean one sprinkler or sprinklers in all rooms?

Does this apply to carports and garages?

C. A. C. Comments :

The Committee rejects this proposal for many reasons including cost , questionable reduction of fire related fatalities and adverse national studies.

235.02

Code Reference See above

Proposal or Chall./Amend. Ref. No. 23.02

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Proposal #23 should be withdrawn and not be incorporated into the B.C. Building Code as a requirement for single family dwellings.

Reason:

(1) Pipe freezing, water quality, water pressure and water volume are pot- ential problem areas for sprinkler systems. A private water well system which we have in many areas of B.C. is not necessarily a reliable water source.

(2) Smoke detectors provide a cost effective alternative to a sprinkler system.

(3) Increased requirements that add to the expense of a residential building and are not fully essential only add to the initial cost, putting a residence out of reach to a potential new home owner, such as in entry level and retirement housing, two areas where there is a need for affordable housing.

(4) A sprinkler system should remain an option item and not be mandatory by B.C. Building Code.

(5) Accidental water damage from system malfunction is a concern.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

235.03

Code Reference See above

Proposal or Chall./Amend. Ref. No. 23.03

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

Our review of relevant studies has shown that the benefits achieved do not justify the expense.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

235.04

Code Reference See above

Proposal or Chall./Amend. Ref. No. 23.04

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

1. The NRC Standing Committee on Housing & Small Buildings have stated that sprinklers will not be required in buildings covered by Part 9 of the NBC 1990.
2. Many areas of B.C. are not serviced by a community water system or electrical power.
3. Many areas of B.C. are subject to electrical service failures.
4. There is no definition for recreational use buildings.
5. Costs of extra staff to municipalities (training & monitoring).
6. Liability to the municipalities.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

235.05 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 23.05

Challenge/ Amendment : See above **C. A. C. Recommendation** *Accept*

Disapprove proposal :

Reason:

1. The NRC Standing Committee on Housing & Small Buildings have stated that sprinklers will not be required in buildings covered by Part 9 of the NBC 1990.
2. Many areas of B.C. are not serviced by a community water system or electrical power.
3. Many areas of B.C. are subject to electrical service failures.
4. There is no definition for recreational use buildings.
5. Costs of extra staff to municipalities (training & monitoring).
6. Liability to the municipalities.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

235.06 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 23.06

Challenge/ Amendment : See above **C. A. C. Recommendation** *Accept*

Disapprove proposal :

Reason:

1. The NRC Standing Committee on Housing & Small Buildings have stated that sprinklers will not be required in buildings covered by Part 9 of the NBC 1990.
2. Many areas of B.C. are not serviced by a community water system or electrical power.
3. Many areas of B.C. are subject to electrical service failures.
4. There is no definition for recreational use buildings.
5. Costs of extra staff to municipalities (training & monitoring).
6. Liability to the municipalities.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

235.07 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 23.07

Challenge/ Amendment : See above **C. A. C. Recommendation** *Accept*

Disapprove proposal :

Reason:

1. The NRC Standing Committee on Housing & Small Buildings have stated that sprinklers will not be required in buildings covered by Part 9 of the NBC 1990.
2. Many areas of B.C. are not serviced by a community water system or electrical power.
3. Many areas of B.C. are subject to electrical service failures.
4. There is no definition for recreational use buildings.
5. Costs of extra staff to municipalities (training & monitoring).
6. Liability to the municipalities.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

235.08 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 23.08

Challenge/ Amendment : See above **C. A. C. Recommendation** *Accept*

Disapprove proposal :

Reason:

1. The NRC Standing Committee on Housing & Small Buildings have stated that sprinklers will not be required in buildings covered by Part 9 of the NBC 1990.
2. Many areas of B.C. are not serviced by a community water system or electrical power.
3. Many areas of B.C. are subject to electrical service failures.
4. There is no definition for recreational use buildings.
5. Costs of extra staff to municipalities (training & monitoring).
6. Liability to the municipalities.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

235.09

Code Reference See above

Proposal or Chall./Amend. Ref. No. 23.09

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

1. The NRC Standing Committee on Housing & Small Buildings have stated that sprinklers will not be required in buildings covered by Part 9 of the NBC 1990.
2. Many areas of B.C. are not serviced by a community water system or electrical power.
3. Many areas of B.C. are subject to electrical service failures.
4. There is no definition for recreational use buildings.
5. Costs of extra staff to municipalities (training & monitoring).
6. Liability to the municipalities.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

235.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 23.1

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

1. The NRC Standing Committee on Housing & Small Buildings have stated that sprinklers will not be required in buildings covered by Part 9 of the NBC 1990.
2. Many areas of B.C. are not serviced by a community water system or electrical power.
3. Many areas of B.C. are subject to electrical service failures.
4. There is no definition for recreational use buildings.
5. Costs of extra staff to municipalities (training & monitoring).
6. Liability to the municipalities.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

235.11

Code Reference See above

Proposal or Chall./Amend. Ref. No. 23.11

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

1. The NRC Standing Committee on Housing & Small Buildings have stated that sprinklers will not be required in buildings covered by Part 9 of the NBC 1990.
2. Many areas of B.C. are not serviced by a community water system or electrical power.
3. Many areas of B.C. are subject to electrical service failures.
4. There is no definition for recreational use buildings.
5. Costs of extra staff to municipalities (training & monitoring).
6. Liability to the municipalities.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

235.12

Code Reference See above

Proposal or Chall./Amend. Ref. No. 23.12

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

1. The NRC Standing Committee on Housing & Small Buildings have stated that sprinklers will not be required in buildings covered by Part 9 of the NBC 1990.
2. Many areas of B.C. are not serviced by a community water system or electrical power.
3. Many areas of B.C. are subject to electrical service failures.
4. There is no definition for recreational use buildings.
5. Costs of extra staff to municipalities (training & monitoring).
6. Liability to the municipalities.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

235.13

Code Reference **Proposal or Chall./Amend. Ref. No.** **23.13**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

The ACNBC Joint Task Group on Mandatory Installation of Sprinklers in Houses which studied the issue of mandating sprinklers has recommended to the appropriate NBCC Standing Committees that sprinklers **not** be made mandatory in houses and the Standing Committees have accepted this recommendation. Much of the information used by the Joint Task Group came from B.C. and therefore, there is no reason that this recommendation should not also be accepted by B.C. **Therefore, sprinklers should not be required in all single family dwellings.** For further information see the Joint Task Group's final report.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

235.14

Code Reference **Proposal or Chall./Amend. Ref. No.** **23.14**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

Fire deaths in single family dwelling units are caused by a smoldering fire in furnishing giving off toxic smoke gases. By the time the area temperature rises enough to set off even the quickest response sprinkler the occupants will be dead from smoke inhalation.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

235.15

Code Reference **Proposal or Chall./Amend. Ref. No.** **23.15**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Do not add new Article to require that all single family dwelling units be sprinklered.

I suggest that an Advisory or Task Group be formed to develop specific wording for those cases in which sprinkler protection of single family dwellings may be appropriate. Such applications could include special needs facilities and locations where the terrain makes access limited or impossible and hence the access requirements could be relaxed or modified if the house is sprinklered.

Reason:

The Joint Task Group on Mandatory Installation of Sprinklers in Houses (March 1990) recommended that the installation of automatic sprinkler systems in houses not be mandatory except for houses that are intended to accommodate persons with special needs as indicated by the enclosed Executive Summary.

(See document pages A to C)

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

235.16

Code Reference **Proposal or Chall./Amend. Ref. No.** **23.16**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Amend Proposal

If this proposal is approved, such sprinklering should be specified as per NFPA 13D "Sprinkler Systems in One-and-Two-Family Dwellings and Mobile Homes".

Reason:

If this proposal is approved, such sprinklering should be specified as per NFPA 13D "Sprinkler Systems in One-and-Two-Family Dwellings and Mobile Homes".

C. A. C. Comments :

The Committee did not accept this proposal or the proposed amendment.

235.17

Code Reference **Proposal or Chall./Amend. Ref. No.** **23.17**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

Smoke alarms are doing the job and cannot justify the cost.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

235.18

Code Reference See above

Proposal or Chall./Amend. Ref. No. 23.18

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

A recent report concluded by a Task Force on mandatory sprinklering of single family dwellings for the NRC do not recommend mandatory sprinklering for single family dwellings but have recommended code changes which could be "trade-offs" if a person wishes to sprinkler a single family dwelling. There is no jusitification with current documents to justify the sprinklering of all single family dwellings.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

235.19

Code Reference See above

Proposal or Chall./Amend. Ref. No. 23.19

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

This is as expensive option that does not seem to do what it was intended to do in existing areas of requirement. Where is the research to justify an extremely expensive implementation?

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

236

Code Reference 9.10.1

Proposal or Chall./Amend. Ref. No. 24

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee rejected this proposal since it would require sprinklering of all Part 9 residential buildings including townhouses, duplexes etc. There may be justification for sprinklering certain types of Part 9 residential occupancies but this proposal is too broad in scope to receive Committee approval.

236.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 24.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

The ACNBC Joint Task Group on Mandatory Installation of Sprinklers in Houses which studied the issue of mandating sprinklers has recommended to the appropriate NBCC Standing Committees that sprinklers not be made mandatory in houses. As the majority of fire losses occur in single family homes, it is logical to assume that, if sprinklers are not warranted there, they should also not be mandated in other residential type occupancies. A new ACNBC Joint Task Group has just been formed and it will study the impact on fire safety of the installation of sprinklers in buildings (other than houses) and their effect on other code requirements. Any future Code changes regarding sprinklers should be based on the findings of this Task Group. **Therefore, no changes should be made at this time.**

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

236.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 24.02

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows :

If this proposal is approved, such sprinklering should be specified as per NFPA 13R "Sprinkler Systems in Residential Occupancies up to 4 Storeys in Height".

Reason:

See above.

C. A. C. Comments :

The Committee did not accept this proposal or the proposed amendment.

236.3

Code Reference See above

Proposal or Chall./Amend. Ref. No. 24.03

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

Over kill for duplexes and townhouses that are not stacked, cannot justify the costs.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

236.4 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 24.04

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

There is no jusitification to require sprinklers for all multiple residential buildings.

A recent report by a Task Force of NRC on mandatory sprinklering of single family dwellings recommend mandatory sprinklers and a Task Force has been recently appointed to review mandatory sprinklering of toher "uses" in the NBC should be jusitification that no change be made at this time.

I would request that the Committee reject this proposal as there is presently no justification to require mandatory sprinkler.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

---

237 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 9

Proposal : 9.10.1.13. **C. A. C. Recommendation** ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal **amended** as follows :

Add at end of the Article: "(See Appendix Sentence 3.1.8.5. (4))"

237.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 9.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Amend the proposal as follows :

Remove authority having jurisdiction and spell out the requirement, size and wording.

Reason:

Should be a set standard.

C. A. C. Comments :

The Committee prefers the amended version of this proposal.

---

238 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 272

Proposal : 9.10.5.1 (2) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers these requirements should remain in the Building Code which is the prime control document for safety in construction.

238.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 272.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Do not amend Articles.

Reason:

These requirements relate to other trades not just electrical contractors in the Building Code.

C. A. C. Comments :

The Committee agrees this requirement should remain in the code.

---

239 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 273

Proposal : 9.10.9.6 **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers these requirements should remain in the Building Code which is the prime control document for safety in construction.

---

240 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 111

Proposal : 9.10.9.8. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers the additional design problems which would be created by this proposal are not justified on the basis of past performance.

240.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 111.01

Challenge/ Amendment : See above **C. A. C. Recommendation** *Accept*

Disapprove proposal :

Reason:

The original intent of this Sentence was to provide additional protection to a separation of such importance that it was required to be non-combustible. There are many problems with this approach:-

i.e.- how to construct a partition to not impinge upon the floor below when the partition falls;
- definition of the term "abuts";
- how to assess potential for damage.

The existing regulation is not well crafted and should not be extended to more situations as this proposal would have it. Other regulations cover support and collapse of fire rated separations (3.1.7.6.)

C. A. C. Comments :

The Committee agrees that the original wording should be retained.

---

241 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 16

Proposal : 9.10.12.5. **C. A. C. Recommendation** *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers fire protection more important than ease of ventilating roof spaces.

241.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 16.01

Challenge/ Amendment : See above **C. A. C. Recommendation** *Accept*

Disapprove proposal :

Reason:

This Article is designed to reduce the incidence of fire spread to other suites via the ventilated attic space. In many cases suite compartmentation was negated by rapid fire spread to the roof/ceiling structure making fire fighting a much more difficult task. There are other methods of providing roof space ventilation.

C. A. C. Comments :

The Committee agrees this requirement should remain in code.

241.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 16.02

Challenge/ Amendment : See above **C. A. C. Recommendation** *Accept*

Disapprove proposal :

Reason:

The possibility of fire spread to the attic space via the soffit does exist and the proposer has not suggested an alternative solution to this potential problem. Therefore, the proposal should be disapproved.

C. A. C. Comments :

The Committee agrees this requirement should remain in code.

241.3 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 16.03

Challenge/ Amendment : See above **C. A. C. Recommendation** *Accept*

Disapprove proposal :
Retain this Article.

Reason:

Perforated aluminum soffit does not provide adequate ventilation to meet the requirements of a vent area of 1/150 of the roof area in low rise roofs. It is easily blocked by blown in place insulation and the wire mesh easily attracts exterior dust and lint blocking the outside surface.

C. A. C. Comments :

The Committee agrees this requirement should remain in code.

242
Code Reference 9.10.13.17
Proposal or Chall./Amend. Ref. No. 10
Proposal :
C. A. C. Recommendation *Accept as amended*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee accepts this proposal **re-worded** as follows :

Editorial Note: Original proposal was shown as 9.10.13.7. Correct location would be as Sentence (2) with Article 9.10.13.1. re-numbered as Sentence (1).

(2) Every door used as a *closure* with a required *fire protection rating* shall have a permanent sign acceptable to the *authority having jurisdiction*, posted on the visible side of the door when it is in the open position, with the words " FIRE DOOR KEEP CLOSED " except where the door is

a) located between a *public corridor* and a *suite* of Group C or D *occupancy*, or

b) fitted with an acceptable hold - open device designed to be released by a signal from a *fire detector*, fire alarm system or sprinkler system (See Appendix A Article A-3.1.8.5.(4))

242.1
Code Reference See above
Proposal or Chall./Amend. Ref. No. 10.01
Challenge/ Amendment :
C. A. C. Recommendation *Reject*

Amend the proposal as follows :
Remove authority having jurisdiction and spell out the requirement, size and wording.

Reason:
Should be a set standard.

C. A. C. Comments :
The Committee prefers the amended version of this proposal.

243
Code Reference 9.10.14.5.
Proposal or Chall./Amend. Ref. No. 330
Proposal :
C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee considers the current wording is adequate.

243.1
Code Reference See above
Proposal or Chall./Amend. Ref. No. 330.01
Challenge/ Amendment :
C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:
The proposed change would permit openings in walls with a limiting distance of less than 1.2 m to be left unprotected. The intent of the current article is to ensure that openings are adequately protected and it indicates that wired glass and glass block, although considered closures by definition, are not considered to be acceptable closures in this situation, regardless of the rating required.

C. A. C. Comments :
The Committee agrees the current wording should remain.

243.2
Code Reference See above
Proposal or Chall./Amend. Ref. No. 330.02
Challenge/ Amendment :
C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:
As written, this would seem to require all openings in an exposing building face to be protected. This would be inconsistent with the overall intent of the spatial separation requirements which permit unprotected openings in the wall where clearance to the property line is adequate for the hazard.

Its agreed that it's appropriate to use glass block or wired glass in these applications; however, the wording is going beyond that point.

C. A. C. Comments :
The Committee agrees the current wording should remain.

244
Code Reference 9.10.15.1.(1)
Proposal or Chall./Amend. Ref. No. 214
Proposal :
C. A. C. Recommendation *Accept as amended*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee accepts this proposal **re-worded** as follows :

(1) Concealed spaces in walls, shall be separated by fire stops from concealed spaces in floors, ceilings, crawl spaces and *attic or roof spaces*.

245

Code Reference 9.10.18.2. (1)

Proposal or Chall./Amend. Ref. No. 62

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation ***Reject***

C. A. C. Comments :

The Committee considers the wording of this proposal could cause interpretation problems.

245.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 62.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

Taking the detectors out of the areas which have a high incidence of fires (Kitchen) and providing detection only in rooms where the doors could be closed seems to be a reduction in the level of safety. If the doors to the bedroom are closed a fire in the outer rooms of the apartment may grow to flashover conditions even before the detector in the bedroom operates.

False alarms are definitely a problem, mostly related to human attitude. This change seems to be a step in the wrong direction to try and correct a problem which is not 100% foolproof.

C. A. C. Comments :

The Committee agrees with this challenge.

245.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 62.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Amend the proposal as follows :

Leave "as is" and add the following : "or may be placed in each bedroom, provided that when more than one smoke alarm is installed they be interconnected".

Reason:

The location of the kitchen or bathroom to the smoke alarm is not the problem. The cause is poor ventilation.

C. A. C. Comments :

The Committee agrees with this challenge and have made a suitable amendment under proposal 45

246

Code Reference 9.10.18.2.(1)

Proposal or Chall./Amend. Ref. No. 215

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation ***Reject***

C. A. C. Comments :

The Committee did not agree with this proposal as they prefer amended proposal # 45 .

246.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 215.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows:

Delete related proposals #61 & 62.

Delete proposal and substitute as follows :

9.10.18.2.(1) Smoke alarms within dwelling units shall be installed between each sleeping area and the remainder of the dwelling unit. Smoke alarms shall be located outside of bedrooms in a hallway or space communicating thereto except that in areas where kitchen and bathrooms are located in the close proximity of the bedrooms, smoke alarms may be located inside each bedroom.

(2) When more than one smoke alarm is required within a dwelling unit smoke alarms shall be wired so that the activation of one alarm will cause all alarms within the dwelling unit to sound.

Reason:

(1) To have proposal #215 recognize the location of kitchen and bath- rooms, source areas for false alarms, in relation to bedrooms and bedroom areas.

(2) To allow flexibility in locating smoke alarms to suit room layout in a dwelling unit.

(3) Increased requirements that add to the expense of a residential building and are not fully essential only add to the initial cost putting a residence out of reach to a potential new home owner such as in entry level and retirement housing, two areas where there is a need for affordable housing.

C. A. C. Comments :

The Committee did not agree with this amendment since the code already requires smoke alarms to be interconnected.

246.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 215.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

Too restrictive and costly (see #245).

C. A. C. Comments :

The Committee agrees with this challenge.

246.3

Code Reference See above

Proposal or Chall./Amend. Ref. No. 215.03

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Support proposal:

Reason:

This is the type of amendment that we were alluding to in our previous comments, ie. when common sense and practicality combine to provide a safer environment. We would like to suggest that a detector be added to any area where cooking is permitted. Wihtout accurate statistics, we might be tempted to assume that besides smoking in bed, kitchen fires are the most common cause of fires in the home.

C. A. C. Comments :

The Committee did not agree with the original proposal or this amendment.

247

Code Reference 9.10.18.2.

Proposal or Chall./Amend. Ref. No. 45

Proposal :

C. A. C. Recommendation ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal **amended** as follows :

Add at the end of proposed Sentence (3) " (See Appendix A) "

Add to the Appendix as follows :

A-9. 10 18.2. (3) Location of Smoke Alarms. This Sentence is not intended to be applied where there is simply a difference in floor level on the same storey e.g. split- level construction. If the smoke alarm is required on a storey which does not have a sleeping room it should be located either in a central location or a location near the access between storeys.

247.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 45.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows :

Add at the end: "and must be interconnected".

Reason:

So that all alarms sound.

C. A. C. Comments :

The Committee did not agree with this amendment since the code already requires smoke alarms to be interconnected.

248

Code Reference 9.10.19

Proposal or Chall./Amend. Ref. No. 11

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers this proposal could result in problems locating hydrants near all small buildings, especially dwelling units. Current code appears to be satisfactory.

248.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 11.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows :

Add to Appendix :

A-9.1.1.1. For fire fighting assumptions, see A-3.

Reason:

This is a more appropriate location to make references that is general in nature and includes both water supply and levels of public fire protection which should be dealt with at the municipal level.

C. A. C. Comments :

The Committee do not agree with this amendment.

248.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 11.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

Subdivision requirements are stringent now.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

249

Code Reference 9.10.19

Proposal or Chall./Amend. Ref. No. 12

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers this proposal could result in the excessive sprinklering of buildings normally not required to be sprinklered and in many cases it could result in a solution which is not technically correct for life safety.

249.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 12.01

Challenge/ Amendment :

C. A. C. Recommendation *Reject*

Amend the proposal as follows :

Add to Appendix :

A-9.1.1.1. For fire fighting assumptions, see A-3.

Reason:

This is a more appropriate location to make references that is general in nature and includes both water supply and levels of public fire protection which should be dealt with at the municipal level.

C. A. C. Comments :

The Committee do not agree with this amendment.

249.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 12.02

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

Very restrictive and costly.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

250

Code Reference 9.10.19.

Proposal or Chall./Amend. Ref. No. 13

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C A. C. Comments :

The Committee prefers the approach in proposal #1

250.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 13.01

Challenge/ Amendment :

C. A. C. Recommendation *Reject*

Amend the proposal as follows :

A water supply for fire fighting, conforming with the Fire Underwriters Survey latest edition of Water Supply for Public Fire Protection shall be provided for every *building* with an *occupant load* exceeding 10.

Reason:

The Code should not prohibit the construction of houses and small low occupancy buildings because of the lack of a fire fighting water supply. It may be reasonable to require fire fighting water supplies for larger Part 9 buildings but not for smaller buildings and especially not for houses. In rural areas there may only be adequate water for domestic purposes and it is not realistic to expect fire fighting water supplies for every building. Using an occupant load maximum of 10 would allow most houses and many small commercial buildings to be built while requiring water supplies for the larger buildings where higher dollar loss and more people are involved.

C. A. C. Comments :

The Committee prefers the approach in proposal #1

250.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 13.02

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Retain existing wording.

Reason:

Fire Underwriters Survey requirements address property protection, not life safety as the Building Code does.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

250.3

Code Reference See above

Proposal or Chall./Amend. Ref. No. 13.03

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows :

Add to Appendix :

A-9.1.1.1. For fire fighting assumptions, see A-3.

Reason:

This is a more appropriate location to make references that is general in nature and includes both water supply and levels of public fire protection which should be dealt with at the municipal level.

C. A. C. Comments :

The Committee prefers the approach in proposal #1

250.4

Code Reference See above

Proposal or Chall./Amend. Ref. No. 13.04

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

Very restrictive and costly, many areas are on wells or other means of supply that cannot meet these standards.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

251

Code Reference 9.10.19.

Proposal or Chall./Amend. Ref. No. 20

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee do not consider this is practical for Part 9 Buildings many of which can be located in remote areas.

251.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 20.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows:

An adequate water supply for fire fighting shall be provided for every *building* with an *occupant load* of greater than 10. (See A-3 Fire Fighting Assumptions in Appendix A).

Reason:

The Code should not prohibit the construction of houses and small low occupancy buildings because of the lack of a fire fighting water supply. It may be reasonable to require fire fighting water supplies for larger Part 9 buildings but not for smaller buildings and especially not for houses. In rural areas there may only be adequate water for domestic purposes and it is not realistic to expect fire fighting water supplies for every building. Using an occupant load maximum of 10 would allow most houses and many small commercial buildings to be built while requiring water supplies for the larger buildings where higher dollar loss and more people are involved.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

251.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 20.02

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows :

Add to Appendix :

A-9.1.1.1. For fire fighting assumptions, see A-3.

Reason:

This is a more appropriate location to make references that is general in nature and includes both water supply and levels of public fire protection which should be dealt with at the municipal level.

C. A. C. Comments :

The Committee do not agree with this amendment.

251.3

Code Reference See above

Proposal or Chall./Amend. Ref. No. 20.03

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

Very restrictive and costly, many areas are on wells or other means of supply that cannot meet these standards.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

252

Code Reference 9.10.19.3.

Proposal or Chall./Amend. Ref. No. 14

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee do not agree with this proposal as it would be very restrictive when applied to all Part 9 buildings.

252.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 14.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

This proposal is too specific for Part 9 buildings and would seriously inhibit development of single family dwelling units on acreage. Current wording allows some judgement by local authorities on suitability of access provided to building.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

252.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 14.02

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows :

Add to Sentence 9.10.19.3.(2)

(h) The *building* street number(s) or sign(s) shall be clearly visible from the public thoroughfare. The number(s) or sign(s) shall be 1m above ground level or 500 mm above local ground snow accumulation depth. The sign(s) or number(s) shall be illuminated or of a material which is highly visible at night. The number(s) and mounting material shall be decay proof or protected from decay. Grass, shrubs and trees shall be 2 m from the sign or the line of sight from the public thoroughfare and shall be kept trimmed at all times.

Reason:

To give firemen the correct address. Here on Saltspring Island many homes have no sign whatsover!!

C. A. C. Comments :

The Committee do not consider the code is the correct location for this type of requirement as it would be more suitably covered by local byelaw.

253

Code Reference 9.11.2.1.(1)

Proposal or Chall./Amend. Ref. No. 101

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee do not support this proposal as an increase in STC rating to 55 could result in a considerable construction cost increase. Indications are that sound transmission paths other than airborne sound transmission is now greater general problem in residential construction.

253.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 101.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Delete proposed change to Sentence 9.11.2.1.(1)

Amend Sentence 9.11.2.1. (2) as follows :

(2) Where a dwelling unit is adjacent to another dwelling unit, an elevator shaft , or a refuse chute, the separating construction shall have a sound transmission class rating of at least 55 , measured in accordance with Subsection 9.11.1. or listed in A-9. 10.3.1. in Appendix A.

Reason:

The original proposal was incorrectly drafted by this Branch and did not reflect the true intent of the proponent. Due to this error this amendment has been drafted to reflect the correct intent.

(See additional 2 page document)

C. A. C. Comments :

The Committee cannot support this amendment as an increase in STC rating to 55 could result in a considerable construction cost increase. Indications are that sound transmission paths other than airborne sound transmission is now greater general problem in residential construction..

253.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **101.02**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Amend the proposal as follows :

9.11.2.1.(2) Where a dwelling unit is adjacent to another dwelling unit, an elevator shaft, or a refuse chute, the separating construction shall have a sound transmission class rating of at least 55, when measured according to ASTM E90 or listed in A-9.10.3.1. Appendix A, or a rating of 50 when measured acording to ASTM E336.

Reason:

It is a documented fact that at ratings of STC 55 and higher assemblies tested in the field (ie. according to ASTM E336) are frequently 5 or more STC points inferior to the same assemblies when tested in the laboatory (ie. according to ASTM E90). This does not necessarily indicate a deficiency in the assembly, but points to systematic differences between field and lab conditions - see the attached section A-9.11.1. from the 1990 NBC.

Our concern is that if the party wall requirement changed to STC 55 without qualification, it will become particularly onerous for developers who choose not to use one of the listed assemblies in A-9.10.3.1., since local building officials are not likely to accept a derated test.

Therefore we propose that Sentence 9.11.2.1.(2) be amended as above.

C. A. C. Comments :

The Committee cannot support this amendment as an increase in STC rating to 55 could result in a considerable construction cost increase. Indications are that sound transmission paths other than airborne sound transmission is now greater general problem in residential construction..

253.3 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **101.03**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

The new 1990 NBCC requirement of an STC of 50 is an increase over the 45 STC required in 1985. This was in response to public complaints of poor quality construction. In addition, the NBCC raised STC requirements around some shafts to 55 which is appropriate. To raise the STC requirement to 55 simply because several assemblies may or may not present adequate performance is not a reason for a carte blanche increase in the requirements for all assemblies.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

253.4 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **101.04**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

We went from 45 to 50 in the last code change, it would be costly to increase it again, which cannot be justified.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

---

254 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **154**

Proposal : 9.13.5.3.(1) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees the proposal should be rejected as performance of current requirement has proved to be satisfactory.

254.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **154.01**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

The purpose of dampproofing the interior surface of concrete foundation walls is to keep moisture, either that released from the curing concrete or that which moves through the wall by capillary action or cracks, from penetrating the insulation and framing on the inside of the foundation wall. Such moisture barriers are installed only on the below-ground portion of the wall so that any moisture that does get through, either the moisure barrier or the interior air barrier, has a route to escape. If no such escape route is provided, moisture will remain trapped between the two barriers and adversely affect the insulation and framing.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

---

255 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **112**

Proposal : 9.13.6.2. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees the original proposal should be rejected as in many cases it is difficult to determine that radon gas will be a problem before completion of the building.

255.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 112.01

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Proposals #114 & 115 are related so these should also be deleted.

Reason:

Sand is a poor base for a concrete slab and does not comply with size requirements of code ie. will all pass 4 mm sieve. Main reason for cracking of slabs is poor concrete practices not poly.

Radon problems cannot be pin pointed until building is constructed so Sentence (2) not enforceable.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

255.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 112.02

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

Too costly for most areas of B.C.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

256

Code Reference 9.14.3.3(1).

Proposal or Chall./Amend. Ref. No. 34

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees the original proposal should be rejected as current requirement has proved to be satisfactory.

257

Code Reference 9.14.3.3(4)

Proposal or Chall./Amend. Ref. No. 33

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees the original proposalshould be rejected as in some areas choice of aggregate is limited, also building paper is a poor filter media.

257.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 33.01

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

Too restrictive and will not work.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

258

Code Reference 9.16.2.1.

Proposal or Chall./Amend. Ref. No. 114

Proposal :

C. A. C. Recommendation *Accept as amended*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee cannot accept this proposal to delete Article 9.16.2.1. in its entirety however it is prepared to **amend** the Article as follows :

Add at the beginning of the Article :

" In areas where the presence of radon gas has been documented, "

258.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 114.01

Challenge/ Amendment :

C. A. C. Recommendation *Reject*

Disapprove proposal :

Proposal #112 & 115 are related so these should also be deleted.

Reason:

Sand is a poor base for a concrete slab and does not comply with size requirements of code ie. will all pass 4 mm sieve. Main reason for cracking of slabs is poor concrete practices not poly.

Radon problems cannot be pin pointed until building is constructed so Sentence (2) not enforceable.

C. A. C. Comments :

The Committee cannot support this challenge as they prefer the amended version.

259

Code Reference 9.18.3.4.

Proposal or Chall./Amend. Ref. No. 155

C. A. C. Recommendation ***Reject***

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee cannot support this proposal as a 4" diameter pipe could not adequately ventilate the average crawl space.

259.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 155.01

C. A. C. Recommendation ***Reject***

Challenge/ Amendment :

Amend the proposal as follows:
Delete proposal and substitute:
Add to the end of original Article 9.18.3.4. :

"...... and an air vent channel(s) of fire proof material shall be installed in a central location which will vent the crawl space vertically to the exterior of the roof. The air vent(s) shall have a cross sectional area of 0.006 m2 for every 50 m2 of floor area. The air vent(s) shall be capped and screened to prevent the entry of rain, snow and insects. "

Reason:

The proposal requires re-wording.
I believe that this proposal has good merits and will work as a better method than cross ventilation.

C. A. C. Comments :

The Committee cannot support this amendment due to absence of data substantiating performance of proposed measure.

259.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 155.02

C. A. C. Recommendation ***Accept***

Challenge/ Amendment :

Disapprove proposal :

Reason:

(1) Inadequate vent area for most crawl spaces.
(2) Cross ventilation works when installed properly.

C. A. C. Comments :

The Committee agrees the original proposal should be rejected.

259.3

Code Reference See above

Proposal or Chall./Amend. Ref. No. 155.03

C. A. C. Recommendation ***Reject***

Challenge/ Amendment :

Amend the proposal as follows:
Should be for cold crawlspaces only.

Reason:

Heated crawlspace do not require venting.

C. A. C. Comments :

The Committee cannot support this proposal or amendment.

259.4

Code Reference See above

Proposal or Chall./Amend. Ref. No. 155.04

C. A. C. Recommendation ***Reject***

Challenge/ Amendment :

Challenge proposal :

Reason:

Here is a case where it is questionable whether it will even come close to dealing with the problem as a replacement item for good crawlspace cross-venting.

The practical application of a 4" pipe means a 2 x 6 wall or pipe chase to accommodate it. by suggesting a minimum of 12.57 square inches would allow for 2 - 3" pipes or a rectangular metal duct which will give 12 - 13 square inches of area. This would give the builder some practical options.

C. A. C. Comments :

The Committee cannot support this amendment as a 4" diameter pipe could not adequately ventilate the average crawl space.

260

Code Reference 9.18.3.5.

Proposal or Chall./Amend. Ref. No. 119

C. A. C. Recommendation ***Accept***

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees with this proposal.

260.1

Code Reference
See above

Proposal or Chall./Amend. Ref. No. 119.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Support proposal : except that precautions will have to be taken not to pressurize the crawlspace

Reason:

If the crawlspace is pressurized it will force the moisture from the crawlspace up around the heat registers and via cracks along the walls and around the stairs causing dark stains in the carpet.

C. A. C. Comments :

The Committee considers this situation is unlikely to develop if the installation complies with the code.

261

Code Reference
9.18.3.6.

Proposal or Chall./Amend. Ref. No. 179

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not accept this proposal as such a system should be part of the overall mechanical ventilation system.

262

Code Reference
9.19.1.1.

Proposal or Chall./Amend. Ref. No. 156

Proposal :

C. A. C. Recommendation ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal **amended** as follows:
Sentence (1) to remain as per code.
Add new Sentence (3) as follows :

(3) Vents required in Sentence (1) shall have a minimum of 25% of the required vent area located near the top of the roof and a minimum of 25% of the required vent area at or near the eaves.

Re-number existing Sentences (3) and (4) as (4) and (5) respectively.

262.1

Code Reference
See above

Proposal or Chall./Amend. Ref. No. 156.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Disapprove proposal :

Reason:

Although not opposed to the intent of the proposal, the suggested wording is not clear at "the top. ....." and "at the bottom", of what?

The wording does not clearly state what is meant, this would be difficult to interpret for a flat roof. Although it is clear what the proponent is trying to accomplish in ensuring that a certain percentage of the venting is at the top of a gable roof and at the eaves, the wording as proposed would be difficult to interpret and enforce. Other types of roof other than a simple gable roof have to be considered, without clearer wording it is recommended that the proposal be rejected.

C. A. C. Comments :

The Committee cannot support this challenge as low slope roofs are covered by Article 9.19.1.2.

263

Code Reference
9.19.1.3.

Proposal or Chall./Amend. Ref. No. 49

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not accept this proposal as current requirements provide adequate performance, this is more in the nature of an equivalency proposal.

263.1

Code Reference
See above

Proposal or Chall./Amend. Ref. No. 49.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows :

Delete 25 mm and **add** to Sentence 9.19.1.3.(3):

(3) Minimum clearance for insulation (in Sentence 2) may be reduced to 50 mm for roof slopes over 1 in 4 and air vent channels less than 6 m; if an approved air vent channel is installed below the roof sheathing to provide a continuous, unobstructed air channel which is full width of the joist space.

Reason:

I am the original proponent. The information attached indicates that a 25 mm space is insufficient. A 50 mm air space has shown good results under 6 m. Air vents over 6 m should probably remain at 75 mm.

C. A. C. Comments :

The Committee did not accept this amendment as current requirements provide adequate performance, this is more in the nature of an equivalency proposal.

263.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 49.02

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :
Wording not clear in 9.19.1.3.(3).

Reason:

Do not disagree with the intent of the proposal but the wording is not clear. It would be difficult to interpret and apply.
What is "approved air vent channel"? Would this consist of specific product acceptance?
Under "Reasons" reference is made to "such air vent channels" not clear what air vent channels are referenced.
It is recommended that clearer wording of the intent, is required with terminology that is familiar or else the proposal should be rejected.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

264

Code Reference 9.21.1.3.

Proposal or Chall./Amend. Ref. No. 41

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not accept this proposal as flue pipe connections to chimney flues are fully covered by C.S.A. B-365, now referenced in the code.

264.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 41.01

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

Should be part of B.365

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

265

Code Reference 9.21.1.3.

Proposal or Chall./Amend. Ref. No. 42

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not accept this proposal as flue pipe connections to chimney flues are fully covered by C.S.A. B-365, now referenced in the code.

266

Code Reference 9.21.2.2.

Proposal or Chall./Amend. Ref. No. 31

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee considers the combination of the Code and the various referenced standards adequately cover this situation.

267

Code Reference 9.21.2.2.

Proposal or Chall./Amend. Ref. No. 57

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee cannot agree to this proposal since it is already required by the code.

267.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 57.01

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

(See document #57.01-A & B.)

C. A. C. Comments :

The Committee agrees the proposal shoulds be rejected.

268

Code Reference 9.21.2.4.(1).

Proposal or Chall./Amend. Ref. No. 157

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee cannot agree with this proposal. Russian, or Finnish, or Scandinavian "fireplaces" are a few of the names used to describe a hybrid form of space heating appliance, built in masonry. Their construction or acceptance has not been a problem in the past.

268.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 157.01

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

Although I do not disagree with the intent of the proposed change the wording of the proposed change is not definitive enough and will cause confusion.

The suggested wording is not clear, when a greater slope of 45 degrees is permitted, other than an opinion. Russian Fireplace is unknown to many people, to use a description of a fireplace with no technical background is unacceptable.

It is recommended that Committee reject this proposal unless clear definitive regulations can be developed.

C. A. C. Comments :

The Committee agrees the proposal shoulds be rejected.

269

Code Reference 9.21.3.3.

Proposal or Chall./Amend. Ref. No. 30

Proposal :

C. A. C. Recommendation *Accept*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees the new Canadian Standard should be referenced since it is now used by all the major manufacturers .

270

Code Reference 9.21.4.8.

Proposal or Chall./Amend. Ref. No. 40

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee cannot agree with this proposal since it would require greater thicknesses of masonry than required elsewhere in the code and the need for this has not been substantiated.

271

Code Reference 9.21.5.1.(3)

Proposal or Chall./Amend. Ref. No. 27

Proposal :

C. A. C. Recommendation *Accept as amended*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal **amended** as follows :

Add the following after the word flooring : " roofing, "

271.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 27.01

Challenge/ Amendment :

C. A. C. Recommendation *Reject*

Disapprove proposal :

Should be from the required masonry or concrete chimneys.

Reason:

When an extra row of brick is used a clearance should not be required or when insulation is placed between the inner brick and the outer brick.

C. A. C. Comments :

The Committee cannot agree with this proposal as it would only apply if there was either an air space or insulation between inner and outer masonry.

272

Code Reference 9.22.9.3.

Proposal or Chall./Amend. Ref. No. 26

Proposal :

C. A. C. Recommendation *Accept as amended*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal **amended** as follows :

Add the following after the word flooring : " roofing, "

272.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 26.01

Challenge/ Amendment :

C. A. C. Recommendation *Reject*

Disapprove proposal :

Should be from the required masonry or concrete chimneys.

Reason:

When an extra row of brick is used a clearance should not be required or when insulation is placed between the inner brick and the outer brick.

C. A. C. Comments :

The Committee cannot agree with this proposal as it would only apply if there was either an air space or insulation between inner and outer masonry.

273

Code Reference 9.22.10.1.

Proposal or Chall./Amend. Ref. No. 307

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation *Reject*

C. A. C. Comments :

The Committee cannot agree with this proposal as CSA B-365 already covers solid fuel burning appliance reference standards and installation.

274

Code Reference 9.23.3.2.

Proposal or Chall./Amend. Ref. No. 158

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation *Accept*

C. A. C. Comments :

The Committee agrees with this proposal.

275

Code Reference 9.23.3.4.

Proposal or Chall./Amend. Ref. No. 159

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation *Reject*

C. A. C. Comments :

The Committee cannot agree with this proposal .

276

Code Reference 9.23.4.1.

Proposal or Chall./Amend. Ref. No. 47

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation *Accept as amended*

C. A. C. Comments :

The Committee accepts this proposal as an Appendix note amended as follows :

Add at the end of Sentence A-9.23.4.1.(1) as follows :

"Spans as shown in " The Span Book- Span Tables for Canadian Dimension Lumber and Glued- Laminated Timber 1990 " as amended by published errata, are also acceptable."

276.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 47.01

Challenge/ Amendment :

Disapprove proposal :

C. A. C. Recommendation *Accept*

Reason:

Although I am not totally opposed to the intent, as a legal document, without controls as to the input of the information and not being a reference to a standard, I am concerned that the "Handbook" could be altered or changed without proper input, review, etc. that a standard is subject to.

It may be that the same can be accomplished by putting a note in the Appendix and referencing this document as an example of the type reference documents that can be used in the code.

C. A. C. Comments :

The Committee agrees this should be in the Appendix.

276.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 47.02

Challenge/ Amendment :

Support the proposal

C. A. C. Recommendation *Accept as amended*

Reason:

This is a positive step towards maintaining a uniform standard.

C. A. C. Comments :

The Committee accepts this amendment proposal, see amended proposal # 47.

277

Code Reference 9.23.7.2.

Proposal or Chall./Amend. Ref. No. 160

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation *Accept as amended*

C. A. C. Comments :

The Committee accepts this proposal amended as follows :

Add the following after the word compressed : " , or a manufactured sill gasket.. "

277.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 160.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept as amended***

Amend the proposal as follows:

Add to the end of the proposal the words : " or a manufactured sill gasket. "

Reason:

Preformed polyurethane sill gaskets are widely used in new home construction and are easier to use than mineral wood or cauking.

The suggestion that caulking be omitted is acceptable but not for the reason given. Caulking is difficult to apply in this instance and also tends to crack as the wood sill shrinks.

C. A. C. Comments :

The Committee accepts this amendment proposal see amended proposal # 160.

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278 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 162

Proposal : 9.23.9.7. **C. A. C. Recommendation** ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees with this proposal.

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279 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 163

Proposal : 9.23.9.8.(1) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee cannot agree with this proposal as they have accepted an amended version , see # 163.01.

279.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 163.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept as amended***

Amend proposal as follows:

Add Sentence 9.23.9.8.(6) :

9.23.9.8.(6) Interior walls parallel to floor joists and which support kitchen cabinets shall be considerd as loadbearing walls.

Reason:

(1) It is not clear what is meant by the proposed addition to Sentence 9.23.9.8.(1).

(2) The Code already covers support requirements for loadbearing walls.

C. A. C. Comments :

The Committee accepts this proposal subject to **amendment** as follows :

(6) Non-*loadbearing* interior walls, parallel to the floor joists, which support kitchen cabinets shall be supported either by a wall directly beneath the supporting floor joists or by double floor joists under the wall.

279.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 163.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

Phrase is confusing and grammatically incorrect. What should be doubled? Does the propenent mean to make walls supporting kitchen cupboards considered loadbearing according to the Code?

C. A. C. Comments :

The Committee agrees with the rejection of this proposal but have accepted an amended version.

---

280 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 164

Proposal : 9.23.9.8.(4) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee cannot agree with this proposal as they prefer the existing wording.

280.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 164.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Retain Sentence 9.23.9.8.(4) in Part 9; do not make the Sentence an addition to Part 4.

Reason:

The Clause should remain in Part 9 as a reminder to those who do not build structures designed under Part 4. An engineer working with the requirements of Part 4 does not need the Clause, it is part of due and proper design.

C. A. C. Comments :

The Committee agrees with this challenge.

281

Code Reference 9.23.9.8.(5)

Proposal or Chall./Amend. Ref. No. 165

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation *Reject*

C. A. C. Comments :

The Committee cannot agree with this proposed deletion of part of this Sentence as it provides a viable alternative.

281.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 165.01

Challenge/ Amendment :

Disapprove proposal :
Retain existing wording.

C. A. C. Recommendation *Accept*

Reason:

The phrase is a useful reminder to those who normally build under Part 9 without engineering design.

C. A. C. Comments :

The Committee agrees with this challenge.

282

Code Reference 9.23.10.6.

Proposal or Chall./Amend. Ref. No. 166

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation *Reject*

C. A. C. Comments :

The Committee cannot agree with this proposal as it could cause interpretation problems.

283

Code Reference 9.23.11.3.(4).

Proposal or Chall./Amend. Ref. No. 167

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation *Accept*

C. A. C. Comments :

The Committee agrees with this proposal.

284

Code Reference 9.23.12.2.(1)

Proposal or Chall./Amend. Ref. No. 168

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation *Reject*

C. A. C. Comments :

The Committee cannot agree with this proposal as it would not permit lintel spans that exceed the Table even when designed to Part 4.

284.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 168.01

Challenge/ Amendment :

Disapprove proposal :

C. A. C. Recommendation *Accept*

Reason:

If these changes are allowed they would impose severe economic penalties on owners or developers of small buildings. The existing conditions are severe enough.

C. A. C. Comments :

The Committee agrees with this challenge.

285

Code Reference 9.23.13.2.

Proposal or Chall./Amend. Ref. No. 170

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Recommendation *Reject*

C. A. C. Comments :

The Committee cannot agree with this proposal as it could cause interpretation problems.

285.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 170.01

Challenge/ Amendment :

Support the proposal :

C. A. C. Recommendation *Reject*

Reason:

The intent is good because of the expected increased load that the supporting members will have to carry. We would like to suggest that some engineering be done to establish a criteria under which this would be necessary, such as if member span is 75% (engineered part) of allowed maximum span. Many applications of floor and roof members are greatly underspanned because of the use of a common size of material for practical reasons, i.e. floor joists.

C. A. C. Comments :

The Committee cannot agree with this proposal as it could cause interpretation problems.

286

Code Reference 9.23.13.11.

Proposal or Chall./Amend. Ref. No. 171

C. A. C. Recommendation *Reject*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee cannot agree with this proposal as these trusses are still used in parts of the province .

287

Code Reference 9.23.13.11.

Proposal or Chall./Amend. Ref. No. 18

C. A. C. Recommendation *Reject*

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee cannot agree with this proposal as not only would it result in manufacturing problems there is no proof that it would be of any real value in providing additional protection.

287.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 18.01

C. A. C. Recommendation *Accept*

Challenge/ Amendment :

Disapprove proposal :

Reason:

1) This application can affect the structural integrity of the joint connection.
2) This application could void a component manufacturer's warranty and liability.

C. A. C. Comments :

The Committee agrees with this challenge.

287.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 18.02

C. A. C. Recommendation *Accept*

Challenge/ Amendment :

Disapprove proposal :

Reason:

This application could void a component manufacturer's warranty & liability.

C. A. C. Comments :

The Committee agrees with this challenge.

287.3

Code Reference See above

Proposal or Chall./Amend. Ref. No. 18.03

C. A. C. Recommendation *Accept*

Challenge/ Amendment :

Challenge : proposal

Reason:

1. From the article in the June 1990 issue of Fire Command in which the Illinois study is detailed we point out that:

(a) These are ad hoc tests which followed no accepted standard test protocol normally used for evaluating fire performance in materials.

(b) The purpose of these tests was to establish a comparison of 4 different structural materials relative to the control assembly of 2 X 10 joists which are recognized as an acceptable traditional material used to construct wooden buildings.

(c) These tests did not prove or attempt to prove that trusses made with connector plates collapsed or failed permaturely in comparison with other building materials currently in common use, or as the direct result of the usage of metal plates.

(See supporting documents :- 18-A to C (plus back-up info. #18-D thru L).)

C. A. C. Comments :

The Committee agrees with this challenge.

287.4

Code Reference See above

Proposal or Chall./Amend. Ref. No. 18.04

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Delete entirely the proposed Sentence 9.23.13.11.(10) as follows:
(10) The toothed metal truss plates be secured with nails or screws to reinforce the holding power of the teeth.

Reason:

The challengers believe this proposal should be deleted for the following reasons:-

1. The present 1990 NBC Article 9.23.13.11. is completely adequate for the construction of wood trusses and should not be changed.
2. The conclusions drawn from the Illinois Fire Service Inst. fire tests are open to question and indeed may be wrong. See letter of Professor Donald Percival, marked I -1, I -2 & I -3.
3. Other studies show that metal plated wood trusses do provide adequate warning of collapse. Dr. E.L. Schaffer - see attached study marked II -2 maintains the metal plates act as heat reflectors to protect the wood under- neath them.
4. There has been no testing done to prove that additional fasteners would improve the performance of trusses under fire conditions. New research is currently being done by National Fire Research Foundation, see attached proposal marked III-1, which may provide many answers to current concerns.

(See documentation provided)

C. A. C. Comments :

The Committee agrees with this challenge.

287.5

Code Reference See above

Proposal or Chall./Amend. Ref. No. 18.05

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Delete proposed Sentence 9.23.13.11.(10)

Reason:

The safety of firefighters is of prime concern as is the safety of the general public. This proposal is simple but not viable from both a structural and fire safety point of view. The addition of a minor number of nails or screws would not save the joint should the teeth of the plate connection fail under fire or other conditions. Adding multiple nails through the connector plate would weaken the joint since the nails would likely split the wood (spacing and the end distance would be too small).

The issue of fire fighter safety in light frame construction in general, not only wood truss systems, has been raised at the National Code level and is under consideration there.

(See documentation #18-A thru X).

C. A. C. Comments :

The Committee agrees with this challenge.

287.6

Code Reference See above

Proposal or Chall./Amend. Ref. No. 18.06

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

Very expensive and cannot be justified.

C. A. C. Comments :

The Committee agrees with this challenge.

287.7

Code Reference See above

Proposal or Chall./Amend. Ref. No. 18.07

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

(See letter and report #18.07-A thru W.)

C. A. C. Comments :

The Committee agrees with this challenge.

287.8

Code Reference See above

Proposal or Chall./Amend. Ref. No. 18.08

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

Again, where is the common sense balance to a perceived problem? How many nails or screws are required and of what size? What is the minimum standard? Is it one nail or screw per plate, per side, per member?

C. A. C. Comments :

The Committee agrees with this challenge.

288 **Code Reference** 9.23.14.2. **Proposal or Chall./Amend. Ref. No.** 147

Proposal :

C. A. C. Recommendation ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts the intent of this proposal and as a result **amended** existing Sentence 9.23.14.2.(4) as follows :

Delete all wording after " absorption " and **Add** in " (See Appendix A) "

288.1 **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 147.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Disapprove proposal : Section 9.23.14.2. should remain as stated.

Reason:

(1) Composite panels are produced with phenolic resins as is plywood and have similar water absorption properties.

(2) Factory built homes have been produced in B.C. for the last 20 years with subflooring as permitted in 9.23.14.2.(2) & (4). These floors are still structurally sound today.

C. A. C. Comments :

The Committee cannot agree with this challenge and have accepted an amended version of the proposal.

288.2 **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 147.02

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Disapprove proposal : Section 9.23.14.2. should remain as stated.

Reason:

(1) Composite panels are produced with Phenolic resins as is plywood and have similar water absorption properties.

(2) Tens of thousands of factory built homes have been produced in B.C. for the last 20 years with subflooring as permitted in 9.23.14.2. & (4). These floors are still structurally sound today.

C. A. C. Comments :

The Committee cannot agree with this challenge and have accepted an amended version of the proposal.

288.3 **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 147.03

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows:

Delete Sentence 9.23.14.2 (2) and **substitute** :

(2) Particle board or composite flooring conforming to Grade N-1 or N-2 in CAN 3-0288.1 "Interior Mat Formed Wood Particle Board " may be used only when a building is constructed in a factory so that the subfloor will not be exposed to weather.

Reason:

Classification to specifically identify particleboard.

C. A. C. Comments :

The Committee cannot agree with this amendment, they have accepted an amended version of the proposal.

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289 **Code Reference** 9.23.15.6. **Proposal or Chall./Amend. Ref. No.** 90

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not accept this proposal as it would prefer acceptance of 11 mm sheathing products without edge support to be by compliance with CSA O325.0.

289.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 90.01

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

We challenge the proposed change on the basis that it would be an excessive relaxation of requirements as set out in Table 9.23.15.A. It would permit the use of panels significantly thinner than those specified, based on product standards. We also challenge such a change being made for OSB without the same relaxation being provided for plywood, neither of which we would recommend.

Table 9.23.15.B. already makes provision for panels thinner than those required in Table 9.23.15.A. provided such panels are qualified and monitored according to the requirements of the referenced Performance Standard (CSA 0325).

The change was proposed for OSB panels made to Product Standard CAN/CSA O437. Tests carried out at the COFI Technical Centre show that 11.1 mm Grade 0-2 OSB made to CAN/CSA O437 fails to meet the deflection criteria for roof sheathing applied over 610 mm (24 in.) span with edge unsupported, as specified in Table 2 of CAN/CSA O325.0 - 88. The tested panels were sampled within the low end of the panel thickness range as specified by the above Performance Standard. The Test Report can be provided to the Building Standards Branch, if required. The proposed change would provide for the acceptance of panels which fail to meet the requirements for panels rated 1R24, as specified in Table 9.23.15.B.

It is important to note that under provisions of CAN/CSA O437, panels of significantly lower strength and stiffness than those tested for deflection, as described above, could be made.

The change as proposed, would negate the requirements of both Tables 9.23.15.A and B.

The proposed change should be rejected. Grade O-2 wafer or strandboard (or plywood) capable of providing performance, deemed to be adequate, can be used under the provisions of the Performance Standard (CSA 0325), in accordance with Table 9.23.15.B.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

290

Code Reference 9.23.16.5.

Proposal or Chall./Amend. Ref. No. 73

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not accept this proposal as they considered the proposed measure did not significantly improve the code.

290.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 73.01

Challenge/ Amendment :

C. A. C. Recommendation *Reject*

Amend the proposal to read as follows:

9.23.16.5. Joints in Panel Type Wall Sheathing

(1) Panel-type sheathing may be applied either horizontally or vertically.

(2) A vertical joint gap of not less than 3 mm shall be left between sheets of plywood, waferboard, strandboard or fiberboard applied vertically.

(3) A horizontial gap of not less than 3 mm shall be left between sheets of plywood, waferboard, strandboard or fiberboard applied horizontally.

Reason:

Recent test huts constructed in Alberta and Ontario show that there is sufficient air leakage around panel edges and permeability within wood panels to allow moisutue to escape from wall cavities. The normal wood wall sheathing thicknesses of 6 mm to 11 mm provides this ability.

C. A. C. Comments :

The Committee did not accept this amendment as they considered the proposed measure did not significantly improve the code.

290.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 73.02

Challenge/ Amendment :

C. A. C. Recommendation *Reject*

Amend Article to read as follows:

9.23.16.5.(2) A gap of not less than 2 mm shall be left at vertical joints between sheets of plywood, waferboard, strandboard or fibreboard.

(3) A gap, of 3 mm for each metre of wall height, shall be left at horizontal joints in panel-type sheathing; or, an opening of equivalent area shall be provided to each stud space.

Reason:

The suggested approach would be simpler to handle from a practical on-site view. A quick saw cut could provide required "breathing space".

C. A. C. Comments :

The Committee did not accept this amendment as they considered the proposed measure did not significantly improve the code.

291

Code Reference 9.23.16.5.(2)

Proposal or Chall./Amend. Ref. No. 72

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not accept this amendment as they considered the proposed measure did not significantly improve the code.

291.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 72.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

It is covered by changes to proposal #73.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

291.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 72.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Amend Article to read as follows:

9.23.16.5.(2) A gap of not less than 2 mm shall be left at vertical joints between sheets of plywood, waferboard, strandboard or fibreboard.

(3) A gap, of 3 mm for each metre of wall height, shall be left at horizontal joints in panel-type sheathing; or, an opening of equivalent area shall be provided to each stud space.

Reason:

The suggested approach would be simpler to handle from a practical on-site view. A quick saw cut could provide required "breathing space".

C. A. C. Comments :

The Committee did not accept this amendment as they considered the proposed measure did not significantly improve the code.

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292 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 169

Proposal : 9.24.5. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not accept this proposal. The Table mentioned in the proposal is only relevant for plank frame wall construction.

292.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 169.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Support the proposal :

Reason:

To allow single headers in floor systems and other areas as is allowed in Table 9.24.5.B..

C. A. C. Comments :

The Committee did not accept this proposal. The Table mentioned in the proposal is only relevant for plank frame wall construction.

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293 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 234

Proposal : 9.25 **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

Proposals 233 and 234 cover energy conservation in small new buildings . The Committee after careful consideration could not recommend acceptance in its present form. New national energy conservation measures are currently being developed for the next code cycle which could be substantially different from these proposals. As an interim measure, the Committee has amended other proposals requiring minimum insulation levels in all residential occupancies.

293.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 234.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Delete related proposals #148 and 51.
Amend the proposal #234 as follows:
Delete Table 9.25.2.A. And substitute as follows:
(See Appendix of this document for Table)

Reason:

We feel this Table represents the most common minimum thermal standards in Canada today.

- Developed originally by NRC.
- Used by CMHC - Residential standards
- Used by CSA Z-240 standards and A-277 Factory-built.

C. A. C. Comments :

The Committee rejected both this amendment and the original proposal #234. The Committee has accepted an other amendment requiring minimum thermal insulation levels in all residential occupancies.

293.2

Challenge/ Amendment : **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** **234.02**

C. A. C. Recommendation ***Reject***

Amend the proposal as follows :

Add to Article 9.25.1.1. as originally proposed:-

(4) Exceed thermal insulation as shown in Table 9.25.2.A. where the *building* will be largely shaded during the winter months; where the *building* is exposed to high winds; in areas of higher than average heating costs or where the owner wishes to reduce annual heating or air conditioning costs.

Appendix

Add Article as follows :

A.9.25.4. & 5 'Higher level' means the vertical distance measured from the top surface of the footing to the finished ground level at the foundation wall. When this distance is less than 500 mm, the insulation shall extend to the top of the footing. When this distance exceeds 500 mm, the insulation shall extend to a minimum depth of 500 mm from the finished ground level at the foundation wall.

Reason:

9.25.1.1.(4) - To indicate that these insulation standards are minimums and should be exceeded under certain circumstances.

A-9.25.4. & 5. - To define 'higher level' which will cause confusion. I myself am confused. I trust that this is what is meant.

Otherwise #234 is excellent!!

C. A. C. Comments :

The Committee rejected both this amendment and the original proposal #234. The Committee has accepted an other amendment requiring minimum thermal insulation levels in all residential occupancies.

293.3

Challenge/ Amendment : **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** **234.03**

C. A. C. Recommendation ***Reject***

Amend the proposal as follows :

Required insulation.--- Include provision for thermal design to include the contribution of interior wall covering, exterior sheathing, air space and cladding to the total RSI value of the wall.

Reason:

Thermal design would provide the desired RSI value at a cost saving to construction depending solely on the insulation material in the cavity.

C. A. C. Comments :

The Committee rejected both this amendment and the original proposal #234. The Committee has accepted an other amendment requiring minimum thermal insulation levels in all residential occupancies.

293.4

Challenge/ Amendment : **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** **234.04**

C. A. C. Recommendation ***Reject***

Amend the proposal as follows :

Table 9.25.2.A. forming part of Sentence 9.25.2.1.(1), revise to address generic building assemblies; combine rows 1 and 2 as Walls (other than foundation walls) and rows 3, 4 and 5 as roofs.

Reason:

There is no technically sound reason to differentiate between types of construction used for a given building element; no significant difference in their contribution to thermal resistance has been shown. The NRC Energy Measures do not make this distinction.

Recommend identical thermal resistance requirements for insulation in both framed and concrete/masonry construction.

C. A. C. Comments :

The Committee rejected both this amendment and the original proposal #234. The Committee has accepted an other amendment requiring minimum thermal insulation levels in all residential occupancies.

293.5

Challenge/ Amendment : **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** **234.05**

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

Should not be in code, but by regulation. See 296.

C. A. C. Comments :

The Committee agrees that proposal # 234 should be rejected but they have recommended the inclusion of minimum thermal insulation levels in all residential occupancies.

293.6

Challenge/ Amendment : **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** **234.06**

C. A. C. Recommendation ***Reject***

Amend the proposal as follows :

Delete and **substitute** revised proposal:

(See Appendix of this document for details)

Reason:

-Refinement of October 1, 1990 submission6

C. A. C. Comments :

The Committee rejected both this amendment and the original proposal #234. The Committee has accepted an other amendment requiring minimum thermal insulation levels in all residential occupancies.

294 **Code Reference** 9.25.1.1. **Proposal or Chall./Amend. Ref. No.** 67

Proposal : **C. A. C. Recommendation** ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees with this proposal.

294.1 **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 67.01

Challenge/ Amendment : **C. A. C. Recommendation** ***Reject***

Disapprove proposal :

Reason:

Part 5 too restrictive calls for a continuous vapour barrier which is not important, but a continuous air seal is.

C. A. C. Comments :

The Committee have accepted the proposal and do not agree with this challenge.

295 **Code Reference** 9.25.1.1. **Proposal or Chall./Amend. Ref. No.** 148

Proposal : **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee do not agree with this proposal.The Committee after careful consideration could not recommend acceptance in its present form. New national energy conservation measures are currently being developed for the next code cycle which could be substantially different from this proposal. As an interim measure, the Committee has amended an other proposal requiring minimum thermal nsulation levels in all residential occupancies.

295.1 **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 148.01

Challenge/ Amendment : **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

Should be by regulation, not by Code. (See #296).

C. A. C. Comments :

The Committee agrees the original proposal should be rejected. The Committee has also recommended the inclusion of minimum thermal insulation levels in all residential occupancies.

296 **Code Reference** 9.25.2.1 **Proposal or Chall./Amend. Ref. No.** 51

Proposal : **C. A. C. Recommendation** ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal **amended** as follows :

Add new Article 6.2.1.13. as follows :

6.2.1.13. Required Insulation. *Buildings* classified as Group C *major occupancies* shall be provided with thermal insulation between heated space and unheated space, the exterior air or the exterior soil in conformance with Article 9.25.2.1.

Delete Article 9.25.2.1. and **substitute** as follows :

9.25.2.1. Required Insulation. *Buildings* of *residential occupancy* shall be provided with thermal insulation between heated space and unheated space, the exterior air or the exterior soil in conformance with Table 9.25.2. A. (See Appendix A.)

Table 9. 25. 2. A.

Forming Part of Article 9.25.2.1.

Minimum Thermal Resistance of Insulation RSI, m2. oC/W

296.1 **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 51.01

Challenge/ Amendment : **C. A. C. Recommendation** ***Reject***

Disapprove proposal :

Delete in favour of proposal #234.

Reason:

I am the original proponent of this proposal and wish to withdraw it in favour of the far superior #234. Assuming that #234 is adopted.

C. A. C. Comments :

The Committee disagree as they have amended proposal 51.

296.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 51.02

Challenge/ Amendment :

C. A. C. Recommendation *Reject*

Amend the proposal as follows :

Required insulation shall be provided with an RSI value of, walls RSI 2.1, ceilings RSI 3.5, floors over unheated sareas RSI 3.5, walls below grade RSI 1.4, and perimeter of slabs on grade RSI 1.0 for the first 600 mm.

Reason:

To prevent condensation. Additional requirements for economical reasons should be by regulation.

C. A. C. Comments :

The Committee disagree as they have amended proposal 51.

297

Code Reference 9.25.4.3.(4)

Proposal or Chall./Amend. Ref. No. 172

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee disagree with this proposal. Measures to prevent blockage of soffit vents are already covered by Sentence 9.25.4.3.(1).

298

Code Reference 9.25.4.7

Proposal or Chall./Amend. Ref. No. 55

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not accept this proposal as they prefer existing code requirements.

298.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 55.01

Challenge/ Amendment :

C. A. C. Recommendation *Reject*

Amend the proposal as follows :

Add the word " strandboard " after " particleboard."

Reason:

Strandboard is now the principle strand/wafer wood panel product being manufactured.

C. A. C. Comments :

The Committee did not accept this amendment as they prefer existing code requirements.

298.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 55.02

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

Damage will happen above this height, and cause air leakage.

C. A. C. Comments :

The Committee agrees the proposal should be rejected.

299

Code Reference 9.25.5.4

Proposal or Chall./Amend. Ref. No. 59

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not accept this proposal as they prefer existing code requirements. This proposal describes one method of complying with the code it is not the only method.

299.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 59.01

Challenge/ Amendment :

C. A. C. Recommendation *Reject*

Amend proposed Article as follows:

9.25.5.4. Penetration of air barrier protection. Penetrations of the air barrier protection, such as those cut for the installation of electrical wiring, electrical boxes, piping or ductwork, shall be sealed to maintain the integrity of the air barrier protection over the entire surface. All electrical boxes shall be installed within approved poly pans or be covered with approved wide band poly tape or by other acceptable methods. The locations where electrical wires pass through the poly pans shall be caulked with an approved sealant. This shall be done to provide an air tight barrier.

Reason:

(1) This proposal needs to take into consideration different construction methods. Where electrical boxes can be covered over the back of the box because the back of the box is accessible due to method of construction used, poly tape provides an acceptable sealing method for the air barrier. Poly tape for this application has been accepted and been used for a number of years.

C. A. C. Comments :

The Committee did not accept the proposal or this amendment.

299.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **59.02**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Reason:

Other products are available such as electrical boxes with gaskets. It is an enforcement problem. Some areas enforce it now.

C. A. C. Comments :

The Committ agrees the proposal should be rejected.

---

300 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **107**

Proposal : 9.26.2.1.(2) **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not accept this proposal as they prefer an amended version.

300.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **107.01**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Accept***

Amend the proposal as follows :

In proposed Sentence 9.26.2.1.(2) **alter** the word "graded " to " certified as to grade ".

In proposed Sentence A-9.26.2.1.(2) **alter** the word "grading " to "certification of the grade ".

Reason:

To improve terminology.

C. A. C. Comments :

The Committee agrees with this amended version of the proposal.

300.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **107.02**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Disapprove proposal :

Disagree with authority having jurisdiction.

Reason:

Should be spelled out what the requirement is.

C. A. C. Comments :

The Committee did not accept this proposal. They have accepted an amended version of the proposal which includes reference to the authority having jurisdiction.

---

301 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **355**

Proposal : 9.26.4.1. **C. A. C. Recommendation** ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal **amended** as follows :

Reword the Article 9.26.4.1.as follows: " Sheet metal flashing shall consist of not less than 1.19 mm thick sheet lead for manufactured vent flashing and 1.73 mm thick sheet lead generally, 0.33 mm thick galvanized............."

Article 9.26.4.8. remains as proposed.

301.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 355.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows:
Delete and subsitute as follows:

9.26.4.1. Materials. Sheet metal flashing shall consist of fnot less than 1.73 mm thick sheet lead generally and 1.19 mm thick sheet lead for manufactured vent flashing. 0.33 mm thick galvanized steel, 0.46 mm thick zinc or 0.48 mm thick aluminum. Flashing for vent piupes may also be fabricated from polycholroprene (neoprene) at least 2.89 mm thick.

9.26.4.8. Flashings for Vent Pipes. Flashings for vent pipes shall be designed to conform to the pitch of the roof, prevent the entry of water to the roof space and allow for thermal movement of the vent pipe. Flashings shall extend not less than 100 mm horizontally in all directions, with a minimum overall size of 300 mm and a height of 150 mm unless otherwise accepted.

Reason:

Delete the double thickness standard for sheet lead flashing.

Use one or the other. There is no documented evidence that sheet lead as generally used requires to be thicker than manufactured flashing.

Our years of experience dealing with cedar roofs and failures have noted that if there is to be a difference in thickness tolerance then it should be the manufactured product because of the stress possibility of reducing the thickness of the lead further.

Also, the use of the word manufactured is of little use in the context it is used in. Manufactured is refered to all goods fabricated from raw material, whether it be by hand or by machinery.

Sheet lead is raw material and simply by cutting a square piece and bending you have manufactured a piece of step flashing.

How does the Building Inspector deal with this?

C. A. C. Comments :

The Committee have accepted an amended version of the original proposal.

302

Code Reference 9.26.10

Proposal or Chall./Amend. Ref. No. 175

Proposal :

C. A. C. Recommendation ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not agree with this proposal as the performance of current practice is satisfactory.

302.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 175.01

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Reason:

We recognize that the Cedar Shake & Shingle Bureau's (Bureau) proposal is to delete this section thus not providing for taper-sawn shakes to be laid as shingles, which do not require interleaving.

The reason for this is that flat grain, as would be allowed by the Bureau's proposal to provide a No. 2 grade (see CCP #177), would provide a higher risk of splitting and checking which may occur over keyways. This would, in all probability, develop a leaky roof. Therefore, interleaving, as required for shakes, would be necessary in all cases to prevent leakage.

We are therefore recommending that the Bureau proposal to delete this section be deferred until performance studies on flat grain grades or shakes be completed. Until appropriate data is available to support a new submission for such a product, the option of applying taper-sawn shakes as shingles should still remain in the Code.

C. A. C. Comments :

The Committee agrees with rejection of the proposal.

302.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 175.02

Challenge/ Amendment :

C. A. C. Recommendation ***Accept***

Disapprove proposal :

Leave the Article as is.

Reason:

3 mm of added thickness does not affect the performance of Tapersawn cedar shakes when applied as shingles.

In the 1920's and 30's a standard production item was what was called a "Jumbo shingle" and was dimensionally the same as our present Taper-sawn shake. It was applied at shingle exposure with no underlay or interlay and have performed extremely well.

The present Code permits No. 2 Shingles to be laid at a reduced exposure of 115 mm with the requirement of interlay and underlayment. See appeal No. 1123, Feb. 23,1990.

Grading Rules permit :

(a) Mixed grain can be 100 % flat grain.
(b) Only need to be 11" clear from the butt for an 18 " shingle.
(c) Short shingles, including shims and feather tips not less than 16 " permitted.

The reason to delete the article is not well thought out in a practical sense.

Taper-sawn shakes in general will be dealt with under proposal No. 177.

C. A. C. Comments :

The Committee agrees with rejection of the proposal.

303

Code Reference 9.26.10.

Proposal or Chall./Amend. Ref. No. 176

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not agree with this proposal. They prefer the current wording.

303.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 176.01

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Retain the heading as established at Subsection 9.27.9.(B.C.B.C. Second Revision).

Reason:

This has been reviewed in detail and it is felt that it would be preferable to leave the title as it now stands.

It is better to describe the product in a reasonably generic sense. To try and include the various product descriptions in a title would make it rather lengthy, and reduce its effectiveness. Also, there are other products that should be added to this title if more precise product descriptions were to be incorporated.

C. A. C. Comments :

The Committee agrees with rejection of the proposal.

304

Code Reference 9.26.10.1.

Proposal or Chall./Amend. Ref. No. 177

Proposal :

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not agree with this proposal as the performance of current practice is satisfactory.

304.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 177.01

Challenge/ Amendment :

C. A. C. Recommendation *Accept*

Disapprove proposal :

Defer the amendment until performance testing and data is available.

Reason:

It is recognized that the B.C.B.C. Second Revision requires that all shakes be 100% edge grain, and further that CSA-0.118.1, ***Western Red Cedar Shakes & Shingles***, does not provide for a No. 2 grade. In this context, the industry is currently having tests performed at Forintek/Warnock Hersey to determine the leakage performance of flat grain products, particularly its effect on interleaved shake roofs. The industry will be making appropriate submissions to the CSA Technical Committee regarding No. 2 grade shakes, which will include the use of flat grain shakes, based on leakage performance testing. We are therefore proposing that this amendment be deferred until performance data on product containing flat grain is available.

C. A. C. Comments :

The Committee agrees with rejection of the proposal.

304.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 177.02

Challenge/ Amendment :

C. A. C. Recommendation *Reject*

Disapprove proposal :

Reason:

I agree with the intent of this proposal and there is not reason why the lesser grade materials cannot be used successfully to provide good serviceable weather tight roofs.

However, I caution that unless carefully worded and controlled, it will lead to abuse and a nightmare for building authorities to administer or control.

The following points should be considered very carefully.

(Continued on sheets #175.02-A & B.)

C. A. C. Comments :

The Committee did not agree with this endorsement of the proposal as the performance of current practice is satisfactory.

305

Code Reference 9.26.10.3.

Proposal or Chall./Amend. Ref. No. 144

Proposal :

C. A. C. Recommendation *Accept*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees with this proposal.

305.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 144.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows:
Delete Article and **substitute** the following:
9.26.10.3. Spacing and Joints. Joints in any one course of shakes shall be separated not less than 40 mm from joints in adjacent courses and in any three courses no two joints shall be in direct alignment.

Reason:

Per the proponents's reason, the Roof Practices Manual of the Roofing Contractor's Association of B.C., in Sections 7.2.2. (shingles) and 7.2.3. (shakes), the off-setting of joints in alternate (1st and 3rd) courses is only necessary in three-ply construction (standard for shingles and possible with some shake types) where interleaving felts are not used/required. It is not reasonable to require offset joints in alternate courses in standard shake applications (2-ply) with interleaving felts.

C. A. C. Comments :

The Committee did not agree with this amendment.

305.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 144.02

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows:
Delete and **substitute** as follows:
9.26.3.10. Spacing and Joints: Joints in any one course of shakes shall be separated not less than 40 mm from joints in adjacent courses.

Reason:

The original recommendation suggested that in a 3-ply shingle application to try to avoid lining up any 2 joints in any 3 courses, but was never intended to apply to a 2-ply shake application. It serves no useful purpose because there is an area between courses of shakes where there is only 1-ply of shakes and regardless of where a shake splits over a joint there is 4 1/2" to 6" above the joint that is only paper.
(Continued on sheets #144.02-A thru C)

C. A. C. Comments :

The Committee did not agree with this amendment.

306

Code Reference 9.26.10.3.

Proposal or Chall./Amend. Ref. No. 193

Proposal :

C. A. C. Recommendation ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees with this proposal.

306.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 193.01

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows:
Delete Article and **substitute** the following:
9.26.10.3. Spacing and Joints. Joints in any one course of shakes shall be separated not less than 40 mm from joints in adjacent courses and in any three courses no two joints shall be in direct alignment.

Reason:

The requirement for offset/staggered joints in alternate (every third) course(s) for standard 2-ply shake applications is unreasonable and unnecessary in light of the fact that interleaving felts are required. The offsetting of joints in alternate or every third course is required in shingle or some shake applications where 3 -ply application results and where interleaving felts are not required.

C. A. C. Comments :

The Committee did not agree with this amendment.

306.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 193.02

Challenge/ Amendment :

C. A. C. Recommendation ***Reject***

Amend the proposal as follows:
Delete Article and **substitute** the following:
9.26.10.3. Spacing and Joints. Joints in any course of shakes shall be separated not less than 40 mm from joints in adjacent courses.

Reason:

The original recommendation suggested that in a 3-ply shingle application to try to avoid lining up any 2 joints in any 3 courses, but was never intended to apply to a 2-ply shake application. It serves no useful purpose because there is an area between courses of shakes where there is only 1-ply of shakes and regardless of where a shake splits over a joint there is 4 1/2" to 6" above the joint that is only paper.
(Continued on sheets #144.02-A thru C.)
There is no point in including an application requirement, it serves no real purpose, yet will increase the cost of installing shakes.

C. A. C. Comments :

The Committee did not agree with this amendment.

307 **Code Reference** 9.26.10.5. **Proposal or Chall./Amend. Ref. No.** 178

Proposal : **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not agree with this proposal as the performance of current practice is satisfactory.

307.1 **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 178.01

Challenge/ Amendment : **C. A. C. Recommendation** ***Accept***

Disapprove proposal :

Defer the details of installation and use of a No. 2 flat grain product.

Reason:

It is recognized that the B.C.B.C. Second Revision requires that all shakes be 100% edge grain, and further that CSA-0.118.1, ***Western Red Cedar Shakes & Shingles***, does not provide for a No. 2 grade. In this context, the industry is currently having tests performed at Forintek/Warnock Hersey to determine the leakage performance of flat grain products, particularly its effect on interleaved shake roofs. The industry will be making appropriate submissions to the CSA Technical Committee regarding No. 2 grade shakes, which will include the use of flat grain shakes, based on leakage performance testing. We are therefore proposing that this amendment be deferred until performance data on product containing flat grain is available.

C. A. C. Comments :

The Committee agrees with rejection of the proposal.

307.2 **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 178.02

Challenge/ Amendment : **C. A. C. Recommendation** ***Reject***

Amend as follows:

9.26.10.5. Exposure. The exposure of Premium grade No. 1 grade handsplit/resawn and taper sawn wood shakes shall not exceed 190 mm for shakes at least 450 mm long and 250 mm for shakes at least 600 mm long.

The exposure of No. 2 grade taper-sawn shakes shall not exceed 140 mm for shakes at least 450 mm long and 190 mm for shakes at least 600 mm long.

(Editorial Note:- This would require re-wording to new format.)

Reason:

There is no problem with this amendment but the application methods referenced are misleading, and will not provide the rational used in Reason provided. Also, there is no saving in the cost factor.

No. 2 Taper-sawn shakes at a 7 1/2" exposure only provide one layer of shake protection as they are only required to be 12" clear and can have defects of 1 1/2" at the 12" an above distance from the butt. With 15" exposed at the joint these defects could well be exposed in the joint below the butt line of the next course.

Also, the recommendations are that the interlay felts be applied every other course, not every course.

From the point of reality this recommendation reduces the shake .....

(Continued on sheet #175.02-A thru C.)

C. A. C. Comments :

The Committee did not agree with this amendment.

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308 **Code Reference** 9.26.17.2. **Proposal or Chall./Amend. Ref. No.** 173

Proposal : **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not agree with this proposal as this is traditionally covered under plumbing.

---

309 **Code Reference** 9.27.7.1. **Proposal or Chall./Amend. Ref. No.** 19

Proposal : **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not agree with this proposal as the considerable extra cost could not be justified in many areas. In areas where there is particular danger from wildland fires, treatment of shakes and other fire precautions should be covered by local regulations.

309.1

Challenge/ Amendment : **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 19.01

C. A. C. Recommendation *Accept*

Delete proposal #19.

Reason:

Shakes and shingles have only proven to be a serious fire hazard in wildland fire situations. Local government can control their use by bylaw. To ban shakes and shingles throughout the whole province is not necessary. Roofing combustibility should be controlled by performance standards, not by specific product exclusion. If highly combustible roofing is considered to be a hazard in a specific area it should be controlled by requiring the roofing to meet a Class A, B or C rating as determined be testing to CAN4-S-107, Standard Method of Fire Test of Roof Coverings". Fire retardant teated shakes and shingles can meet a Class C rating.

C. A. C. Comments :

The Committee agrees with rejection of the proposal.

309.2

Challenge/ Amendment : **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 19.02

C. A. C. Recommendation *Accept*

Delete proposed change #19.

Reason:

Roof coverings for Part 9 buildings are not regulated on the basis of their fire performance. If such regulation is to be proposed, it should be equitably applied to all roof covering materials.

It has not been demonstrated that switching to fire-retardant treated shakes will have a significant impact upon the wildland fire problem, given the wide range of other factors.

C. A. C. Comments :

The Committee agrees with rejection of the proposal.

309.3

Challenge/ Amendment : **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 19.03

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

(See Document #19.03-A.)

C. A. C. Comments :

The Committee agrees with rejection of the proposal.

309.4

Challenge/ Amendment : **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 19.04

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

Too restrictive and costly, it may be valid in some areas.

C. A. C. Comments :

The Committee agrees with rejection of the proposal.

309.5

Challenge/ Amendment : **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 19.05

C. A. C. Recommendation *Accept*

Disapprove proposal :

Reason:

To have such a sentence added to the Building Code is an emotional response.

At present there are Code restrictions applied to cedar shingles in certain high risk situations. To expand this to all cedar shakes is not warranted. Also, it adds considerable extra expense to cedar roofing which is contrary to what the Code is trying to achieve (reduce costs where they are not warranted).

(Continued on sheet #19.05-A.)

C. A. C. Comments :

The Committee agrees with rejection of the proposal.

310

Proposal : **Code Reference** 9.31.4.1. **Proposal or Chall./Amend. Ref. No.** 104

C. A. C. Recommendation *Accept*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees with this proposal.

310.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 104.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Amend the proposal as follows :

9.31.4.1. A kitchen sink, lavatory, bathtub, or shower, and water closet shall . . . . available. See section 9.5.7.1.

Reason:

To have at least one bathroom in all dwelling units that allow sufficient space to accommodate a bathtub. It is the owners choice if he wishes to put in a shower instead of a bathtub as long there is enough room to remove the shower and install a bathtub if necessary sometime in future. It is too costly to install a bathtub later if the room size is too small. Will retain Section 9.5.7.1.

C. A. C. Comments :

The Committee did not agree with this challenge.

310.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 104.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Disapprove proposal :

Reason:

The proposed change is not definative enough in that the bathtub in a single family dwelling unit usually incorporates the shower. A change such as this without defining a bathtub or shower " cabinet " may encourage bathtubs of such small dimensions that they would not be practical.

The elimination of a bathtub in lieu of a shower cabinet would certainly save some space but surveys indicate that the prime occupants of single familly dwellings are families with small children and elderly couples both of which generally bathe rather than shower.

W e would therefore be opposed to such an inconsiderate code change.

C. A. C. Comments :

The Committee did not agree with this challenge.

311 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 174

Proposal : 9.31.4.1. **C. A. C. Recommendation** ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee have accepted proposal #104 which is identical to this proposal.

311.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 174.01

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Amend proposal as follows:

Add to the end of the Article as follows: "See Article 9.5.7.1."

Reason:

To have at least one bathroom in all dwelling units that allow sufficient space to accommodate a bathtub. It is the owners choice if he wishes to put in a shower instead of a bathtub as long there is enough room to remove the shower and install a bathtub if necessary sometime in future. It is too costly to install a bathtub later if the room size is too small. Will retain Article 9.5.7.1.

C. A. C. Comments :

The Committee did not agree with this challenge.

311.2 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 174.02

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Disapprove proposal :

Reason:

The proposed change is not definative enough in that the bathtub in a single family dwelling unit usually incorporates the shower. A change such as this without defining a bathtub or shower " cabinet " may encourage bathtubs of such small dimensions that they would not be practical.

The elimination of a bathtub in lieu of a shower cabinet would certainly save some space but surveys indicate that the prime occupants of single familly dwellings are families with small children and elderly couples both of which generally bathe rather than shower.

W e would therefore be opposed to such an inconsiderate code change.

C. A. C. Comments :

The Committee did not agree with this challenge.

312 **Code Reference** **Proposal or Chall./Amend. Ref. No.** 76

Proposal : 9.32.3. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not agree with this proposal due to anticipated problems in interpretation.

312.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 76.01

C. A. C. Recommendation *Reject*

Challenge/ Amendment :
Support the proposal

Reason:
No reason given.

C. A. C. Comments :
The Committee did not agree with this endorsement of this proposal.

313

Code Reference 9.32.3.

Proposal or Chall./Amend. Ref. No. 151

C. A. C. Recommendation *Reject*

Proposal :
** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee did not agree with this proposal due to anticipated problems in interpretation.

313.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 151.01

C. A. C. Recommendation *Accept*

Challenge/ Amendment :
Disapprove proposal :

Reason:
(1) It is not clear how individual rooms may be ventilated.
(2) Bedroom doors are typically left open.
(3) A forced air heating system will recirculate fresh air to all parts of a home.

C. A. C. Comments :
The Committee agrees with rejection of this proposal.

313.2

Code Reference See above

Proposal or Chall./Amend. Ref. No. 151.02

C. A. C. Recommendation *Accept*

Challenge/ Amendment :
Disapprove proposal :

Reason:
(1) It is not clear how individual rooms may be ventilated.
(2) Bedroom doors are typically left open.
(3) Forced air heating systems will recirculate fresh air to all parts of the home.

C. A. C. Comments :
The Committee agrees with rejection of this proposal.

313.3

Code Reference See above

Proposal or Chall./Amend. Ref. No. 151.03

C. A. C. Recommendation *Reject*

Challenge/ Amendment :
Amend the proposal as follows:
(Agree with the intent, but needs rewording)
Delete proposed Article and **substitute** as follows :
9.33.3.? Bedrooms shall be mechanically ventilated directly or indirectly as prescribed in 9.33.3.1. (See Appendix A.)
Add Appendix Article as follows :
A-9.33.3.? These requirements would be met by the use of a central forced air heating or ventilating system.
or
By a fan that directly or indirectly forced air into the room or fan that directly or indirectly exhaused air from the room.

Reason:
To ensure air change in sleeping rooms.

C. A. C. Comments :
The Committee did not agree with this amendment.

313.4 **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 151.04

Challenge/ Amendment : **C. A. C. Recommendation** *Accept*

Disapprove proposal :

Reason:

If this proposal is included as written, this single article would require that any bedroom, (without attached ensuite), in a hot water or electric baseboard heated house would require.

a) a bath fan be`located in that bedroom, exhausting that bedroom, or
b) an exhaust grill from a central exhaust fan would have to be located in that bedroom.

Problem:

1) The practical field method of complying with this proposal would be to exhaust the bedroom. This action would move us away from a good practice direction where bedrooms, (category 1 rooms), should be supplied not exhausted.

2) This is a big change from current philosophy where the house normally would be exhausted from the bathrooms or kitchen not the bedroom. This would raise ventilation cost as now added exhaust fans would be necessary beyond those which curently provide both bathroom/kitchen or whole house exhaust.

3) Homeowners desire quiet bedrooms. Requiring a bath fan in each bedroom seems unrealistic, as the owner would likely disconnect it rather than let it operate at night when it would interupt his sleep.

4) Current strategy assumes that the principal dehumidistat controlled fan have make-up air sized to provide a suitable opening to allow its safe operation. Does the proponent propose that the make-up air requirements be increased to compensate for this added exhaust. This extra fan could exaggerate the already difficult make-up air problem.

C. A. C. Comments :

The Committee agrees with rejection of this proposal.

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314 **Code Reference** 9.32.3.5. **Proposal or Chall./Amend. Ref. No.** 81

Proposal : **C. A. C. Recommendation** *Accept*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees with this proposal to clarify Table 9.33.3.B.

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315 **Code Reference** 9.32.3.5. **Proposal or Chall./Amend. Ref. No.** 82

Proposal : **C. A. C. Recommendation** *Accept as amended*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal amended as follows :

In both Articles 9.33.3.5. and 9. 33.3.14. after the word " automatically " insert the words " in locations with 2.5 per cent January design temperatures above -10 degrees C "

{ Editorial Note:- Final wording will depend on re-wording to match new 1990 code format }

315.1 **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 82.01

Challenge/ Amendment : **C. A. C. Recommendation** *Accept as amended*

Amend the proposal as follows :

The proponent, HRAI Ventilation B.C. now supplies the following wording for this modification. Into Article 9.33.3.14. we recommend that the following: "For locations with interior design temperatures above -10 degrees C." be inserted following the sentence ending with .... according to Table 9.33.3.C.

Reason:

No reasongiven.

C. A. C. Comments :

The Committee agrees with this amendment.

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316 **Code Reference** 9.32.3.13. **Proposal or Chall./Amend. Ref. No.** 80

Proposal : **C. A. C. Recommendation** *Accept*

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees with this proposal.

316.1 **Code Reference** See above **Proposal or Chall./Amend. Ref. No.** 80.01

Challenge/ Amendment : **C. A. C. Recommendation** *Accept*

Support the proposal

Reason:

No reason given.

C. A. C. Comments :

The Committee agrees with this proposal.

317

Proposal :

Code Reference
9.32.3.14.

Proposal or Chall./Amend. Ref. No. 78

C. A. C. Recommendation *Accept*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee agrees with this proposal.

317.1

Challenge/ Amendment :

Code Reference
See above

Proposal or Chall./Amend. Ref. No. 78.01

C. A. C. Recommendation *Accept*

Support the proposal

Reason:
No reason given.

C. A. C. Comments :
The Committee agrees with this endorsement of this proposal

318

Proposal :

Code Reference
9.32.3.21.

Proposal or Chall./Amend. Ref. No. 77

C. A. C. Recommendation *Accept as amended*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee accepts this proposal amended as follows :
Delete the words: " servicing updraft or downdraft " and substitute " serving "

318.1

Challenge/ Amendment :

Code Reference
See above

Proposal or Chall./Amend. Ref. No. 77.01

C. A. C. Recommendation *Accept*

Support the proposal

Reason:
No reason given.

C. A. C. Comments :
The Committee amended the original proposal without changing the intent.

319

Proposal :

Code Reference
9.32.4.3

Proposal or Chall./Amend. Ref. No. 79

C. A. C. Recommendation *Accept*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee agrees with this proposal.

319.1

Challenge/ Amendment :

Code Reference
See above

Proposal or Chall./Amend. Ref. No. 79.01

C. A. C. Recommendation *Accept*

Support the proposal

Reason:
No reason given.

C. A. C. Comments :
The Commiittee agrees with this endorsement of the proposal.

320

Proposal :

Code Reference
9.33.1.2.

Proposal or Chall./Amend. Ref. No. 74

C. A. C. Recommendation *Accept*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee agrees with this proposal

321

Proposal :

Code Reference
9.34.

Proposal or Chall./Amend. Ref. No. 274

C. A. C. Recommendation *Reject*

** See Code Change Publication dated February 1991

C. A. C. Comments :
The Committee considers these requirements should remain in the Building Code which is the prime control document for safety in construction.

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322 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **66**

Proposal : 10.0.0.0. **C. A. C. Recommendation** ***Accept as amended***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee accepts this proposal **amended** as follows : See Appendix to this document for details.

322.1 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **66.01**

Challenge/ Amendment : See above **C. A. C. Recommendation** ***Reject***

Disapprove proposal :

Reason:

Although the proposal is an attempt to provide regulations for existing buildings declared as "heritage buildings" it appears too great of an effort has been made to compromise life safety and fire protection to satisfy political needs.

There appears to be compromises made without justification or consideration of life safety and fire protection, not only of the building involved but adjoining buildings, by reducing the fire separation of exits, spatial separation etc. with a blanket acceptance of sprinklers.

The A.C.N.B.C. has recently prepared a draft committee paper for consideration, which is based on an in depth study with sound recommendations, title: " Guidelines for Rehabilitation of Buildings Regulated by Part 3 of the N.B.C."

It is suggested that any action at this time is premature. Heritage Buildings which are being renovated can still be dealt with as an equivalency under the equivalency section of the code and could, if recommended by a Fire Protection Engineer, include many of the items in this submission.

To adopt these recommendations at this time, which in some cases do not appear to provide an equivalent level of protection but rely solely on a sprinkler system, seems premature and is not supported by any justification or technical background, the proponent should be required to provide this information.

C. A. C. Comments :

The Committee did not agree with this challenge. The original proposal has been considerably amended and this is reproduced in the Appendix.

323 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **1**

Proposal : A-3 **C. A. C. Recommendation** ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

This will provide assistance to local authorities . (There should also be a cross reference from Article 3.2.5.8.)

324 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **84**

Proposal : A-9.10.3.B **C. A. C. Recommendation** ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees with this proposal as it reflects industry practice which has performed satisfactorily.

325 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **83**

Proposal : A-9.10.3.B **C. A. C. Recommendation** ***Accept***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee agrees with this proposal.

326 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **332**

Proposal : A-9.10.3.A. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee do not consider this change will achieve the stated objective.

327 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **331**

Proposal : A-9.10.3.A. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee do not consider this change will achieve the stated objective.

328 **Code Reference** **Proposal or Chall./Amend. Ref. No.** **333**

Proposal : A-9.10.3.A. **C. A. C. Recommendation** ***Reject***

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not agree with this proposal as most of the testing appears to have been carried out with glass fibre mineral fibre.

329

Code Reference A-9.16.2.1.

Proposal or Chall./Amend. Ref. No. 115

C. A. C. Recommendation ***Reject***

Proposal :

** See Code Change Publication dated February 1991

C. A. C. Comments :

The Committee did not accept this proposal.

329.1

Code Reference See above

Proposal or Chall./Amend. Ref. No. 115.01

C. A. C. Recommendation ***Accept***

Challenge/ Amendment :

Disapprove proposal :

Proposal #112 & 114 are related so these should also be deleted.

Reason:

Sand is a poor base for a concrete slab and does not comply with size requirements of code ie. will all pass 4 mm sieve. Main reason for cracking of slabs is poor concrete practices not poly.

Radon problems cannot be pin pointed until building is constructed so Sentence (2) not enforceable.

C. A. C. Comments :

The Committee agrees with the rejection of the proposal.

1990 Building Code Change Process

Appendix to

Challenge / Amendments and

Code Advisory Committee Recommendations

Proposal # 66

Add as follows:

1.1.3.2. **Add** the following term to the definitions in 1.1.3.2.:

heritage building is a *building* which is legally protected under a Provincial Act or is officially listed by the Provincial or local government. (See Appendix A)

Add new Subsection 2.1.6. to Part 2 and **renumber** existing as required.

2.1.6. Heritage Buildings

2.1.6.1. Alternate Compliance Methods (See Appendix A)

(1) Except as permitted in Sentence (2) this Code applies to the alteration, rehabilitation and change of *occupancy* of *heritage buildings.*

(2) The Alternate Compliance Methods for Heritage Buildings in Table A- 2.1.6.A. in Appendix A may be substituted for requirements contained elsewhere in the Code

Add the following to Appendix A:

A-1.1.3.2. Heritage Building Heritage buildings are buildings that are legally recognized by the Province or a local government as having historic, architectural or cultural value for the Province or their communities. To qualify as a heritage building under the Building Code, a building must be:

(a) Protected by the Province as a heritage property under the Heritage Conservation Act;
(b) protected by a local government as a heritage property under the Municipal Act;
(c) subject to heritage protection through the provisions of a covenant entered into with the Crown or a local government, that is registered against the property in the Land Title Office;
(d) listed as a heritage building in an inventory that has been adopted by resolution of a municipal council or regional district board as its official heritage registry; or
(e) listed in an inventory of heritage buildings maintained for the purpose by the Minister responsible for the Heritage Conservation Act, or in the Provincial Heritage Registry.

A-2.1.6.1. Heritage Buildings

There has been considerable interest shown in recent years in providing more suitable building regulations for dealing with Heritage Buildings. This is partly due to initiative arising from the new Provincial Heritage Act concerning the preservation and rehabilitation of heritage sites and buildings.

It is generally recognized that the present Building Code was primarily written for new construction and provides for a performance level that is significantly higher then what exists with many older buildings. To apply present Building Code requirements to existing buildings is, in many cases, impractical and with Heritage Buildings may compromise historic appearances or authenticity. Therefore, the Table of Alternate Compliance Methods was developed to provide alternate methods for complying with the performance level intended by the Building Code. The use of sprinklers is advocated as one of the primary methods in providing this performance level for Heritage Buildings. Sprinkler systems not only control the fire which aids evacuation, but also provide the added benefit of protecting the building from possible destruction by fire.

The use of the Alternate Compliance Methods in Table A-2.1.6.A.is not mandatory and an owner may choose to apply the Building Code, he may wish to apply Section 2.5 Equivalents or he may wish to apply a combination of these options.

Table A-2.1.6.A. See over page.

Table A-2.1.6..A.

No.	Code Requirement	Alternate Compliance Method
1	Fire Separations 3.1.3.6.(1) and Table 3.1.3.A; 9.10.9. 2 h fire separation required between some major occupancies.	Except for F1 occupancies, 1 h fire separation is acceptable, if the building is sprinklered.
2	Fire Separations 3.1.3.6.(1) and Table 3.1.3.A; 9.10.9. 1 h fire separation required between some major occupancies.	1/2 h fire separation is acceptable if the building is sprinklered.
3	Noncombustible Construction 3.1.5. All materials used in noncombustible construction must be noncombustible unless otherwise permitted.	1. Roofs may be of combustible construction provided the building is sprinklered. 2. Up to 10% gross floor area to a maximum of 10% of any one floor area may be of combustible construction provided the building is sprinklered.
4	Fire-resistance Rating 3.1.7.1.(1); 9.10.3.1. Where a material , assembly of materials or structural member is required to have a fire-resistance rating it shall be tested in accordance with CAN4-S101	A fire-resistance rating may also be used based on : 1. HUD No. 8 Guideline on Fire Ratings of Archaic Materials and Assemblies. 2. Fire Endurance of Protected Steel Columns and Beams, DBR Technical Paper No. 194. 3. Fire Endurance of Unit Masonry Walls, DBR Technical Paper No. 207. 4. Fire Endurance of Light-Framed and Miscellaneous Assemblies, DBR Technical Paper No.222

Table A-2.1.6.A. (Continued)

No.	Code Requirement	Alternate Compliance Method
5	Rating of Supporting Construction 3.1.7.6.; 9.10.8.3. Supporting assemblies to have fire resistance rating at least equivalent to that of the supported floor.	Heavy timber construction is permitted to have a fire resistance rating less than would be required by the Code provided the building: (a) is sprinklered, and (b) does not exceed 6 storeys in building height.
6	Continuity Of Fire Separations 3.1.8.3.(1) and (2); 9.10.9.2. Fire separations are required to be continuous above the ceiling space.	Fire separations are not required to be continuous above the ceiling space where: (a) the ceiling space is noncombustible construction, (b) both fire compartments are sprinklered, or (c) the ceiling has a minimum rating of 30 minutes.
7	Wired Glass 3.1.8.5.(1) and 3.1.8.14.(2); 9.10.13.1. and 9.10.13.5. 6mm wired glass in steel frame required in fire separations.	For fixed transoms or sidelights, 6 mm wired glass fixed to a wood frame of at least 50 mm thickness with steel stops is permitted in a required fire separation.
8	Mezzanines 3.2.1.1.(3) to (6); 9.10.4.1. Mezzanines enclosing more than 10% above the horizontal plane are considered as storey in building height.	Mezzanines may be enclosed up to 40% above the horizontal plane and not considered a storey in building height if the building is sprinklered.
9	Building Height 3.2.2.16. to 3.2.2.62. Noncombustible construction required for buildings over 3 storeys in building height.	Buildings may be of combustible construction up to 6 storeys provided: (a) the building is sprinklered, (b) the building contains Group C, D, E, F2 or F3 occupancies, and (b) floor assemblies not required to exceed 1 h fire separation requirements may be of heavy timber construction.

Table A-2.1.6.A. (Continued)

No.	Code Requirement	Alternate Compliance Method
10	Spatial Separation 3.2.3.; 9.10.14. The area of unprotected opening shall not exceed the limits in Tables 3.2.3.A. or 3.2.3.B.	The area of unprotected opening is not limited provided: (a) the limiting distance is a minimum 1 m, (b) the building has a supervised sprinkler system in conformance with Sentence 3.2.4.11.(5), and (c) the sprinkler system is connected to the fire department in conformance with Sentence 3.2.4.7.(3).
11	Construction of Exposing building Face 3.2.3.7.; 9.10.14.11. The exposing building face is required to have a fire resistance rating and/or be of noncombustible construction.	Exposing building face is not required to have a fire resistance rating if the building is sprinklered. Also, the exposing building face is not required to be of noncombustible construction if it is protected by an exterior sprinkler system conforming to NFPA 13.
12	Roof Covering Fire Resistance Rating 3.2.3.18. Class A, B or C roof covering in conformance with ULC-S107 required.	For existing roofs not covered by a Class A, B or C roofing a manually operated deluge system in accordance with NFPA 13 is permitted.
13	Smoke Alarms 3.2.4.21.; 9.10.18.3. Smoke alarms are required to be connected to an electric circuit.	Smoke alarms may be battery operated in single family homes only.

Table A-2.1.6.A. (Continued)

No.	Code Requirement	Alternate Compliance Method
14	Interconnected Floor Space 3.2.8.; 9.10.1.6.	1. Open stairs in buildings of maximum 4 storeys in building height need not comply with Subsection 3.2.8. provided: (a) the building contains a Group C or D occupancy, (b) the building is sprinklered with fast response sprinklers, (c) corridors opening into the interconnected floor space are separated from the interconnected floor space by a fire separation with the rating required for the corridor, and (d) smoke detectors are installed in the rooms opening into the interconnected floor space and the smoke detectors are connected to the fire alarm system. 2. Open stairs in buildings of maximum 3 storeys in building height, or first 2 storeys and basement, need not comply with Subsection 3.2.8. provided: (a) the building contains a Group C or D occupancies, (b) the building is sprinklered with fast response sprinklers, (c) smoke detectors are installed in the rooms opening into the interconnected floor space and the smoke detectors are connected to the fire alarm system, and (d) at least one means of egress is not through the interconnected floor space.
15	Separation of Suites 3.3.1.1.; 9.10.9.13., 9.10.9.14. Suites are required to be separated from adjoining suites by 3/4 h or 1 h rated fire separations.	Existing fire separations of 1/2 h, such as wood lath and plaster in good condition, are acceptable in buildings not exceeding 6 storeys in building height and sprinklered.

Table A-2.1.6.A. (Continued)

No.	Code Requirement	Alternate Compliance Method
16	Corridor fire separation 3.3.1.4.; 9.10.9.15. Public corridors are required to be separated from the remainder of the building by a fire separation having a fire resistance rating of at least 3/4 h.	Existing corridors with 1/2 h fire resistance ratings, such as wood lath and plaster in good condition, are acceptable in residential occupancies provided the building: (a) does not exceed 6 storeys in building height, and (b) is fully sprinklered with fast response sprinklers.
17	Corridor Width 3.3.1.9. and 3.4.3.1.; 9.10.9.15. Public and exit corridors are permitted to have a minimum width of 1100 mm.	Public and exit corridors are permitted with a minimum width of 800 mm provided: (a) the occupant load of the building is maximum 20 people, and (b) the building does not exceed 3 storeys in building height.
18	Door Swing 3.3.1.10. and 3.4.6.11.; 9.9.6.5. Doors required to swing in the direction of travel	2nd egress door from a room is not required to swing in the direction of travel provided: (a) the building is sprinklered and the system is supervised in conformance with Sentence 3.2.4.7.(3), and (b) the occupant load of the building is maximum 100 people.
19	Stairs, Ramps, Handrails and Guards 3.3.1.13., 3.3.1.15., 3.3.1.17., 3.4.7.5., 3.4.7.6.; 9.8	Existing conditions that do not comply fully with the requirements are permitted if they are acceptable to the authority having jurisdiction.
20	Transparent Doors and Panels 3.3.1.18.; 9.6.5.2. Glass in doors and sidelights are required to be protected by guards and to be safety glass.	Existing glass or transparent panels that do not comply fully with the requirements are permitted if sufficiently discernible or guards provided in hazardous situations.

Table A-2.1.6.A. (Continued)

No.	Code Requirement	Alternate Compliance Method
21	Dead-end Corridors 3.3.1.9.(7); 9.9.7.2. Dead-end corridors are permitted to a maximum length of 6 m.	1. Dead-end corridors are permitted to a maximum length of 10 m in Group C occupancies provided: (a) the building is sprinklered with fast response sprinklers, and (b) smoke detectors are installed in the corridor system. 2. Dead-end corridors are permitted to a maximum of 15 m in length in Group D, E, F2 and F3 occupancies provided: (a) the building is sprinklered with fast response sprinklers, and (b)smoke detectors are installed in the corridor system.
22	Exits 3.4.2.1.; 9.9.8.2. Floor areas shall be served by not fewer than 2 exits as required by Table 3.4.2.A.	Floor areas may be served by a single exit within the limits of Table 3.4.2.A. provided: (a) the building does not exceed 3 storeys in building height, (b) the building is sprinklered with fast response sprinklers, and (c) all floor areas are protected by a system of smoke detectors connected to a fire alarm system.
23	Reduction of Exit Width 3.4.3.6.(3); 9.9.6.2. Swinging doors in their swing shall not reduce the effective width of exit stairs and landings to less than 750 mm.	Existing swinging doors in their swing are permitted to reduce the effective width of exit stairs and landings to a minimum of 550 mm provided: (a) they serve Group C or D occupancies, (b) the building does not exceed 4 storeys in building height, and (c) the building is sprinklered.

Table A-2.1.6.A. (Continued)

No.	Code Requirement	Alternate Compliance Method
24	Fire Separation For Exit 3.4.4.1.; 9.9.4. Exits are required to be separated from the remainder of the floor by a fire separation having a fire-resistance rating of not less than 3/4 h.	1. Buildings of 3 storeys or less may have exits that are separated by a fire separation that does not have a fire-resistance rating provided: (a) the building is sprinklered with fast response sprinklers, and (b) the sprinkler system is supervised in accordance with Sentence 3.2.5.4.(11). 2. Buildings not exceeding 6 storeys in building height may have exits that are separated by a 3/4 h fire separation provided the building is sprinklered.
25	Exits Through Lobbies 3.4.4.2.; 9.9.8.5. Rooms adjacent to the lobby are required to be separated by a fire separation.	Rooms adjacent to the lobby are not required to be fire separated provided: (a) the floor area is sprinklered with fast response sprinklers, and (b) smoke detectors are installed in the adjacent rooms.
26	Rooms Opening into Exit 3.4.4.4.(7); 9.9.2.6. Service and ancillary rooms are not permitted to open directly into an exit.	Service and ancillary rooms may open directly into an exit provided : (a) the room is sprinklered with fast response sprinklers, and (b) weatherstripping is installed on the door to prevent the passage of smoke.
27	Illumination of Exit Signs 3.4.5.1.(2); 9.9.10. Exit signs are required to be illuminated continuously while the building is occupied.	Where exit signage may compromise historic appearances, or authenticity of displays, exit signs may be installed to light only on an emergency condition, such as by the fire alarm system or due to power failure.

Table A-2.1.6.A. (Continued)

No.	Code Requirement	Alternate Compliance Method
28	Clearance from Exit Doors 3.4.6.10.(1) Stair risers shall not be closer than 300 mm from an exit door.	Except as permitted in Sentences 3.4.10.(2) or 9.9.6.6.(2), existing exit doors shall not extend beyond the first riser.
29	Fire Escapes 3.4.7.; 9.9.2.3. Fire escapes are required to conform to Article 3.4.7.13.	Existing fire escapes that do not completely conform to Article 3.1.7.13. are acceptable provided: (a) the fire escapes are acceptable to the authority having jurisdiction, and (b) the building is sprinklered.
30	Fire Escape Construction 3.4.7.2.; 9.9.2.3.	Existing combustible fire escapes are permitted if the building is permitted to be of combustible construction by Part 3 , Part 9 or by these Compliance Tables.
31	Protection of Fire Escapes 3.4.7.13.(5); 9.9.2.3. Openings in the exterior wall adjacent to the fire escape are required to be protected by closures.	Existing openings in the exterior wall adjacent to the fire escape are not required to be protected by closures provided: (a) the building is sprinklered, and (b) a sprinkler head is located within 1.5 m of the opening required to be protected by Sentence 3.4.7.13.(5).
32	Vertical Service Space 3.5.3.1. Vertical service spaces are required to be separated from the adjacent floor area by a rated fire separation.	Existing vertical service spaces that do not completely conform to the rated fire separation requirements are acceptable provided the vertical service spaces are sprinklered.

Table A-2.1.6.A. (Continued)

No	Code Requirement	Alternate Compliance Method
33	Height and Area of Rooms 3.6.1.; 9.5 The height and area of rooms are required to comply to minimum dimension requirements.	Existing rooms are not required to comply to the minimum dimension requirements of Subsection 3.6.1. or Section 9.5.
34	Window Areas 3.6.2.1.; 9.7.1. Windows in dwelling units are required to comply to minimum dimensions.	Existing windows are not required to comply with the minimum dimensions of Article 3.6.2.1. or Subsection 9.7.1.
35	Washroom Requirements 3.6.4.; 9.31 Buildings are required to be provided with a minimum number of washroom fixtures.	Existing facilities are not required to completely comply to the requirements of Subsection 3.6.4. or Section 9.31 provided it is acceptable to the authority.
36	Disabled Access 3.7	Article 3.7.4.5. shall apply to existing buildings.
37	Area of Refuge 3.7.3.27. Area of refuge is required from every floor area in conformance with Article 3.7.3.27.	Area of refuge is not required from floor areas that are sprinklered with fast response sprinklers.
38	Seismic Anchorage of Exterior Decoration 4.1.9.	Existing exterior decorations are not required to fully comply to the anchorage requirements of Subsection 4.1.9. provided: (a) adequate means of protection is provided, or (b) there is no exposure to the public.
39	Mechanical Systems Part 6 and Part 7	Existing mechanical systems in buildings are not required to fully comply to the requirements of Parts 6 or 7 provided: (a) it is not an unsafe condition, and (b) it is acceptable to the authority having jurisdiction.

Amendment Number 234.01

Table 9.25.2.A

Minimum Thermal Resistance (RSI Value) (1) for Building Assemblies in Buildings up to and Including 3 Storeys in Building Height and having a gross Area not exceeding 600 m2

Maximum No. of Degree Days (2)	Foundation Walls Less than 50% Above Grade (3)	Foundation Walls 50% or more Exposed Above Grade (3)	Perimeter Insulation Around Slabs-on-Grade		Floors	Above Grade Walls	Roof/Ceil. (4)
			Slabs Without Heating	Slabs With Heating			
3500	1.5	2.5	0.8	1.3	4.7	2.5	4.7
5000	1.5	3.0	1.3	1.7	4.7	3.0	5.6
6500	1.5	3.4	1.7	2.1	4.7	3.4	6.4
8000 (5)	1.5	3.7	2.1	2.5	4.7	3.7	7.1

Notes to Table 9.25.2.A.

(1) Refers to the overall thermal resistance of the various building assemblies. The effects of framing and furring members may be disregarded in calculating thermal resistance. RSI values are in m2 C/W.

(2) Degree days for various geographical locations are listed in " The Supplement to the NBC of Canada 1985 ". Where the degree days for a particular area is different from those listed, interpolation between listed values is permitted to obtain the required RSI value.

(3) Percentage of exposure is determined by area considering each wall individually. Where a foundation wall consists of various portions of different types of construction (e.g., poured concrete plus wood frame), percentage of exposure shall be calculated individually for each portion and the minimum RSI value so determined shall apply to that portion only.

(4) Thermal resistance may be reduced near the eaves to the extent made necessary by the roof slope and required ventilation clearances but the minimum thermal resistance at a point directly above the inner face of the exterior wall shall be not less than RSI 2.1.

(5) Values listed are acceptable for areas with more than 8000 degree days but higher thermalresistance is recommended for these areas.

Amendment Number 234.06

Delete - Sentence 9.25.1.1.(1) and **substitute** the following:

(1) Except as provided in Sentences (2) to (3) this Section applies to thermal insulation and measures to control condensation for all *buildings* intended for use on a continuing basis during the winter months.

(2) *Buildings* classified as Group C *major occupancies*, used as motels or hotels, and having a *conditioned floor* area exceeding 500m2 shall conform to Sections 5.2, 5.3 and Part 6.

(3) *Buildings* classified as Groups D, E, and F2 and 3 *major occupancies* and having a *conditioned floor* area exceeding 500m2 shall conform to Sections 5.2, 5.3 and Part 6.

(See Appendix)

Delete - Article 9.25.2.1. and **substitute** the following:

9.25.2.1. Required Insulation

(1) All walls, ceilings and floors separating heated space from unheated space, the exterior air or the exterior soil shall be provided with thermal insulation in accordance with Table 9.25.2.A. or Table 9.25.2.B.

(See Appendix A).

(2) Radiant heated floors over unheated spaces shall be insulates with minimum 2.1 RSI (R12) insulation.

Table 9.25.2.A.

Forming Part of Sentence 9.25.2.1.(1)

Minimum Thermal Resistance of Insulation RSI,m2.oC/W(1) (R-value, hr.sq.ft.oF/Btu) for Buildings

SPACE HEATING FUEL: NATURAL GAS, PROPANE, WOOD OR ELECTRIC HEAT PUMP

Building Assembly	Maximum Number of Celsius Degree Days			
	up to 3500	4500	5500	above 5500
Framed walls (other than foundation walls)	3.0(17)	3.5(20)	3.5(20)	3.5(20)
Concrete/masonry walls (other than foundation walls)	2.1(12)	2.1(12)	2.1(12)	2.1(12)
Framed roof assemblies with attic space	4.2(24)	4.9(28)	5.3(30)	7.0(40)
Cathedral ceilings/framed flat roof assemblies	4.2(24)	4.9(28)	4.9(28)	4.9(28)
Concrete roof assemblies	3.5(20)	3.5(20)	3.5(20)	3.5(20)
Framed floor assemblies separating heated space from unheated space or the exterior	4.2 (24)	4.9(28)	4.9(28)	4.9(28)
Foundation wall assemblies:				
- Concrete or masonry	1.3(7)	1.8(10)	2.1(12)	2.1(12)
- Framed	3.5(20)	3.5(20)	3.5(20)	3.5(20)
Concrete floor slab edges (2)	1.8(10)	2.1(12)	2.1(12)	2.6(15)
Concrete floor assemblies separating heated space from unheated or the exterior	2.1(12)	2.1(12)	2.1(12)	2.1(12)
Windows and skylights	DG	DG	DG	DG

FOOTNOTES:

(1) Specified insulation levels are nominal values of the insulation as measured through the cavity between framing members, where applicable.

(2)See Sentence 9.25.4.5.(4).

DG = Double glazing

Table 9.25.2.B.

Forming Part of Sentence 9.25.2.1.(1)

Minimum Thermal Resistance of Insulation RSI,m2.oC/W(1) (R-value, hr.sq.ft.oF/Btu) for Buildings

SPACE HEATING FUEL: ELECTRICITY* OR OIL

Building Assembly	Maximum Number of Celsius Degree Days			
	up to 3500	4500	5500	above 5500
Framed walls (other than foundation walls)	3.5(20)	4.4(25)	4.4(25)	4.4(25)
Concrete/masonry walls (other than foundation walls)	2.1(12)	2.1(12)	2.1(12)	2.6(15)
Framed roof assemblies with attic space	7.0(40)	7.0(40)	7.0(40)	7.9(45)
Cathedral ceilings/framed flat roof assemblies	4.9(28)	4.9(28)	4.9(28)	4.9(28)
Concrete roof assemblies	3.5(20)	3.5(20)	3.5(20)	3.5(20)
Framed floor assemblies separating heated space from unheated space or the exterior	4.9(28)	4.9(28)	4.9(28)	4.9(28)
Foundation wall assemblies:				
- Concrete or masonry	2.1(12)	2.1(12)	2.1(12)	2.1(12)
- Framed	3.5(20)	3.5(20)	3.5(20)	3.5(20)
Concrete floor slab edges (2)	2.1(12)	2.1(12)	2.1(12)	2.6(15)
Concrete floor assemblies separating heated space from unheated or the exterior	3.5(20)	3.5(20)	3.5(20)	3.5(20)
Windows and skylights	DG	DG	DG	TG

FOOTNOTES:

(1) Specified insulation levels are nominal values of the insulation as measured through the cavity between framing members, where applicable.

(2)See Sentence 9.25.4.5.(4).

DG=Double glazing; TG= Triple glazing *Excluding heat pump

Delete Article 9.25.4.4. and **substitute** the following:

9.25.4.4. Insulation in Crawl Spaces.

(1) Heated crawl space walls shall be insulated in accordance with Table 9.25.2.A. or Table 9.25.2.B.

(2) Insulation applied to the external face of the wall shall extend to the top of the footing or 500 mm below finished ground level, whichever is the higher level.

(3) Except as required in Sentence (4) insulation installed on the interior of the wall shall extend to the top of the footing or to 500 mm below the level of the crawl space, whichever is the higher level.

(4) If the insulation on the interior of the wall is of a type that may be damaged by water the insulation shall be applied so that there is not less than 50 mm clearance above the crawl space floor.

(5) Where the exposed portion of the crawl space wall exceeds an average of 600 mm above ground level the wall shall be insulated to foundation wall values. (See Appendix A)

Delete - Article 9.25.4.5. and **substitute** the following:

9.25.4.5. Insulation around and under Slabs-on-Grade.

(1) Insulation around and under slabs-on-grade shall be located so that heat from the building is not restricted from reaching the ground beneath the perimeter, where exterior walls are not supported by footings extending below frost level.

(2) Insulation applied to the external face of the perimeter wall shall extend to the top of the footing or 500 mm below the finished ground level, whichever is the higher level.

(3) Except as permitted in Sentence (4) insulation installed on the interior of the wall shall extend to the top of the footing or 500 mm below the underside of the slab-on-grade, whichever is the higher level.

(4) Where perimeter slab-on-grade insulation is installed in accordance with Table 9.25.2 A or Table 9.25.2.B. it shall extend a minimum of 500 mm from the inside face of external walls, interior wall insulation may terminate at this level.

(5) Where heating ducts are installed in or beneath slabs-on-grade, minimum 1.8 RSI (R-10) insulation shall be installed below the slab or duct, this insulation shall extend a minimum of 500 mm on either side of the ducts.

(6) Where the slab-on-grade contains a radiant heating system, insulation shall be installed beneath the slab or entire system to a minimum level of 1.8 RSI (R-10). (See Appendix A)

Appendix

A-9.25.1.1.(2) & (3) These sentences cover two exceptions to thermal insulation measures in buildings that would normally be included under Part 9 requirements. Due to nature of the energy usage of these building types it would be technically penalizing to apply Part 9 requirements instead of Part 6 ASHRAE requirements. The use of 500 m^2 of heated or cooled floor area as the limiting factor is a result of energy analysis of these types of occupancy.

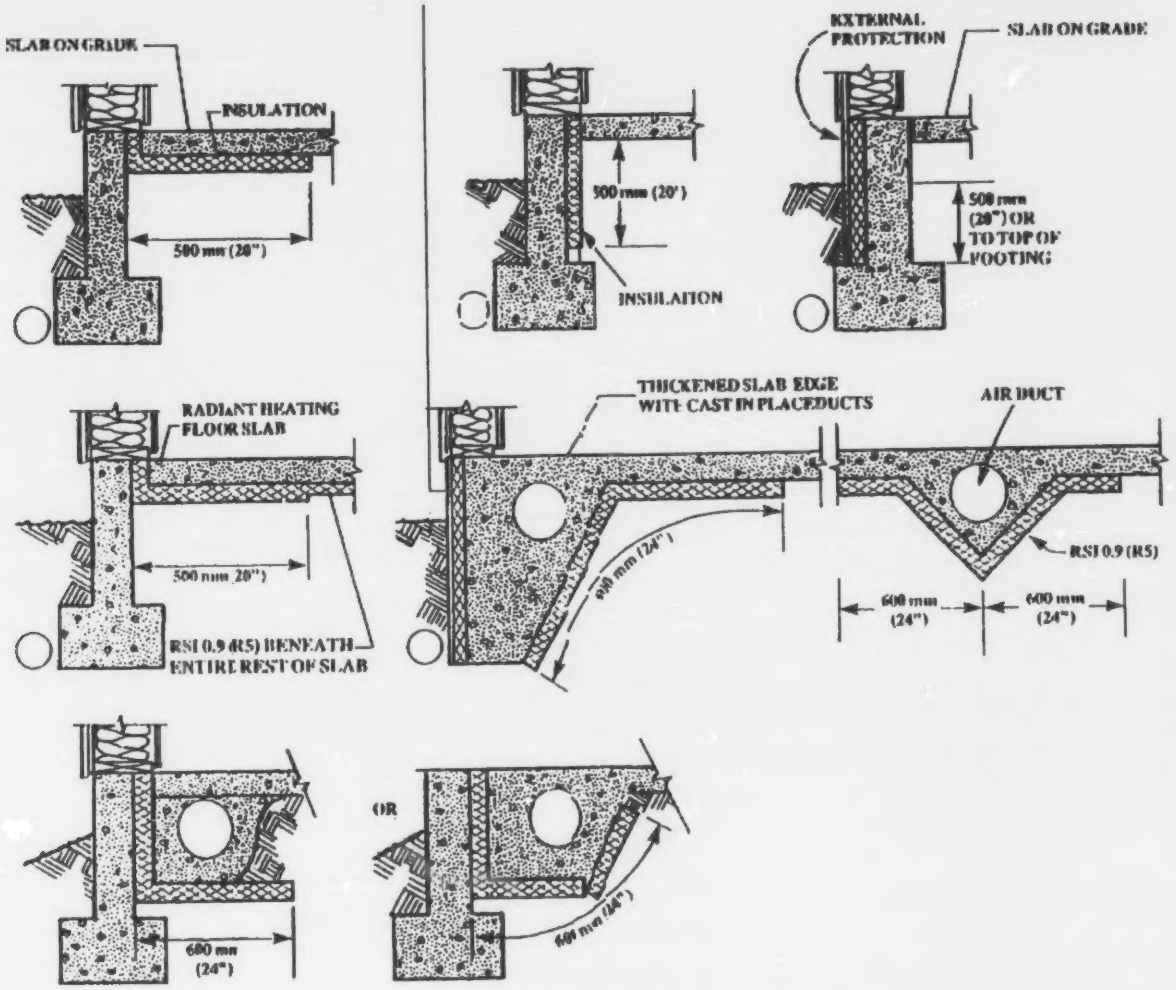
A-9.25.2.1.(1) Insulation values other than those required by Table 9.25.2.A. or Table 9.25.2.B. will be permitted provided it is established that the total building design heat loss will not be higher than if designed to these Tables and taking into consideration fuel and equipment to be installed.

In order to accommodate high levels of insulation in an attic it is sometimes necessary to modify roof or rafter framing. While such modifications are generally simple and inexpensive, standard roof framing procedures can be used and thickness of attic insulation reduced at the roof perimeter provided:

a)the insulation reaches its full required thermal resistance value within 1m of the exterior wall face, and

b) the thermal resistance of the attic insulation within this1m is not reduced below the required value of the exterior wall insulation. Attic insulation should extend over the top plate to the outside wall face.

SKETCHES RELATED TO AMENDMENT NUMBER 234.06


SLAB ON GRADE
INSULATION
500 mm (20")
500 mm (20')
INSULATION
EXTERNAL PROTECTION
SLAB ON GRADE
500 mm (20") OR TO TOP OF FOOTING
RADIANT HEATING FLOOR SLAB
500 mm 20")
RSI 0.9 (R5) BENEATH ENTIRE REST OF SLAB
THICKENED SLAB EDGE WITH CAST IN PLACE DUCTS
600 mm (24")
AIR DUCT
RSI 0.9 (R5)
600 mm (24")
600 mm (24")
600 mm (24")
OR
600 mm (24")

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British Columbia Building Code 1990
Challenge of C.A.C. Recommendation

Please print or type:-

Proposal or Challenge / Amendment Ref. No.:- ☐

Brief Description of Proposal or Challenge / Amendment being Challenged

(Sufficient information is required to clearly identify which recommendation is being challenged and to verify that the number stated above is correct.)

Reason for Challenge :-

(Challenges must have some justification or technical substantiation to proceed and should be suitable for presentation at the public Forum.)

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Please Submit Before October 15, 1991